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ELMER DREW MERRILL

1876—1956

A Biographical Memoir by WILLIAM J. ROBBINS

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Biographical Memoir

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October 15, 1876—February 25, 1956

BY WILLIAM J. ROBBINS

ELMER DREW MERRILL was born at East Auburn, Maine, October 15, 1876, and died in the Lemuel Shattuck Hospital, Forest Hills, Massachusetts, February 25, 1956, at the age of seventy-nine. Few American botanists had as long and distinguished a career or were as well-known and widely honored.

His parents and immediate ancestors were farmers, fishermen, factory workers, and the like, upright and industrious but with limited means, culture, and outlook. His father was a direct descendant of Nathaniel Merrill, the first immigrant of that name who settled in Ipswich (Newbury), Massachusetts in 1635. His grandmother White was believed to have been descended from Peregrine White of the Plymouth Colony. His immediate ancestry was of English (White), Scottish (Cummings), and French (Merrill, Noyes) origin.

Both sides of his family evidenced the adventurous and pioneering spirit which characterized Merrill's career. His grandfather Noyes was a "forty-niner" who left his young children in charge of his wife and made the long journey to California via Panama, returning to Maine after a short and financially unsuccessful stay in California. His father ran away to sea at the age of fourteen, shipping as a cabin boy to the Orient via Cape Horn.

East Auburn, in which Merrill spent his early years, is located about three miles from Auburn, Maine. It included one general

store, a school, a meeting hall, a church (Baptist), and about fifty houses. At the outlet of Lake Auburn there was a sawmill, a furniture factory, and a grist mill. The village was made up of farmers and workers in the shoe factories of Auburn. Few people in it had traveled farther than Boston, Massachusetts. The community was not particularly religious; most residents took their religious duties lightly; Merrill's parents were not churchgoers and he himself never attended church or Sunday School. He was brought up, in his own words, more or less as a "heathen."

Merrill was one of six children, having two older brothers, a sister, a twin brother (Dana T.), and one brother who died in infancy. His mother, Mary Adelaide (Noyes) Merrill (born about 1845, died 1893) was very active, energetic, and ambitious for her sons. His father, Daniel C. (born 1837, died 1925) followed the sea for some fifteen years and then settled in East Auburn, where he worked in the shoe factories, farmed, and made occasional fishing trips to the Grand Banks. His father was impatient at times and emphatic in his language, and would remark when a tool had disappeared: "Those damned twins, they scatter things from hell to breakfast."

The twins assisted their grandfather Noyes in the farming operations of milking; haying; planting potatoes, beans, turnips, and other vegetable crops; hoeing and harvesting them, and of course picking and removing rocks which they firmly believed grew like potatoes. Merrill saw a good deal of his grandfather Noyes, tall, straight, with abundant black hair, heavy eyebrows, patriarchal gray beard, and shaven upper lip, a man of character and of pronounced opinions. The farming experience was doubtless responsible in part for Merrill's later interest in cultivated plants and their origin.

Although Merrill's older brothers and sister ended their formal education with grammar school, he and his twin brother continued through high school, influenced by their teacher in the village school, Miss Margaret Wilson, and by their mother. The first year of high school was completed in the village school at East Auburn under the supervision of Miss Wilson in a class of five or six pupils, but

the last three years were taken in the Auburn High School three miles from the Merrill home. Each school day Merrill walked to school and back, never missing a day or arriving late, even though the trip was made on occasion on snowshoes and he might find the school dismissed because of inclement weather. This school experience Merrill believed established in him the quality of persistence to which he assigned most of the success which came to him in later years. The scholastic requirements of the high school were not high; Merrill had almost no home studying to do and had elected the so-called English course with no Latin nor Greek, a decision which he was to regret keenly in later life.

In addition to helping with the farm work and going to school, Merrill early developed an interest in natural history and in collecting. He built up a respectable collection of birds' eggs, collected rocks and minerals, Indian relics, local woods, and shelf fungi, which he assembled years before he realized they were plant forms. Even before he reached high school he had become interested in collecting and naming plants, though he had no manual of the local flora and depended on the common names in the few publications available.

Merrill had no intention of continuing his education beyond high school, but gradually the idea of college grew because a number of his friends planned a college career and because of the influence of his mother, who had left a small legacy specifically for Merrill's college education. With no preparation in Latin or Greek, the classical colleges of New England were closed to him and, therefore, he and his twin brother decided to study engineering and in the fall of 1894 entered the Maine State College at Orono, a land grant institution which three years later became the University of Maine. Maine State College was a small institution with about two hundred students, most of whom were taking engineering, but the freshman class in which Merrill enrolled was relatively large, about ninety, of whom about half eventually completed the four years.

Before the end of Merrill's first year in college, however, he decided that engineering required too much mathematics and at the

beginning of the second year he transferred to the general science course. Merrill says of his college experience that he made no striking record; he was not an athlete, not a leader because he was by nature diffident and lacked confidence in himself, not a hard student, and was restricted in his activities because of limited funds. In addition to the small legacy from his mother, Merrill borrowed money and spent his vacations earning more in the state fish hatchery.

His early interest in natural history and collecting continued in college. He devoted a good deal of attention to biology, especially the classification of flowering plants, stimulated by Professor F. L. Harvey, who taught botany, zoology, entomology, and geology and inspired Merrill to field work and research, especially in the lower groups of plants. In fact, the only formal course in botany taken by Merrill was in the cryptogams. During his college career he collected on Mount Washington and Mount Katahdin, and by the time he left Maine he had accumulated a private herbarium of more than 2,000 specimens in all groups, which he later gave to the New England Botanical Club.

Merrill was graduated as valedictorian of his class with a Bachelor of Science degree in 1898 and returned the following September as Assistant in Natural Science at a salary of \$250.00 for nine months. No formal graduate work was offered at the University of Maine, so Merrill took courses to round out his undergraduate program and followed his own bent in the pursuit of systematic botany, but with little or no supervision.

In the spring of 1899, Merrill took a United States Civil Service examination for a position as Assistant Agrostologist in the United States Department of Agriculture. However, to be certain of some employment he accepted a fellowship (board, room, and laundry) in plant pathology at the Experiment Station at Geneva, New York. On reporting there for duty in July he found a letter appointing him as Assistant Agrostologist with the Department of Agriculture at an annual salary of \$1,200 and, against the advice of Dr. W. H. Jordan,

Director of the Geneva Station, accepted the appointment and reported in Washington, D. C., for duty on July 7, 1899.

In Washington, Merrill served as an assistant to F. Lamson-Scribner, then the leading authority in America on the classification of grasses. There, during two and a half years he gained a knowledge of herbarium methods, of literature on the classification of the grasses, of methodology in dealing with material and descriptions, of problems of nomenclature, and of the principles of taxonomy, and a wide acquaintance with the grasses of North America. In a sense this period was a graduate course in which Merrill was largely his own teacher, utilizing the resources of an active and extensive herbarium. Field experience in Wyoming, Idaho, and Montana supplemented his training in Washington.

In spite of his interest in systematic botany, Merrill had not yet settled on his eventual career, and enrolled in the evening classes of the Medical School of George Washington University, where he completed three semesters of work. It is possible that he might have continued his medical training and become a physician, but in 1901 the Philippine Commission authorized the establishment of the Insular Bureau of Agriculture in Manila, and Merrill was offered and accepted the post of Botanist at an annual salary of \$2,000. He arrived in Manila in April, 1902, where he remained for nearly twenty-two years, and there the course of his life work was firmly fixed.

The situation Merrill found in Manila was most discouraging. He began work in a vacant building without even a chair or table, not to speak of botanical publications or specimens. The botanical collections assembled by Vidal from 1876 to 1888 had been destroyed by fire in 1897, together with the entire botanical library; the collection of botanical literature at the Jardin Botanico had disappeared during the American occupation of Manila, and the duplicate set of Vidal's herbarium in the Museo Biblioteca had also disappeared; the botanical material assembled by Fernandez-Villar for the third edition of Blanco's Flora de Filipinas had been destroyed when the

building in which it was stored was burned by American troops in 1899. Some botanical literature had been acquired and some plants (usually unnamed) collected by the Bureau of Forestry. Truly, to say the least, a most discouraging outlook. But when Merrill left the Philippines in 1923, the herbarium contained 275,000 mounted sheets, two thirds Philippine and one third external, chiefly Malaysian, and the library had become botanically unsurpassed in the East. These accumulations were burned by the Japanese Army one day before the liberation of Manila in 1946. The liberal policy Merrill had followed in the distribution of duplicate specimens enabled him, then at Harvard, to locate material in American and European herbaria and to aid Dr. Eduardo Quisumbing, an outstanding Philippine botanist trained by Merrill, to begin rebuilding.

Merrill found that he was expected to devote his attention to "practical" work, but decided to build a reference collection of botanical specimens and acquire the necessary literature. He began by collecting specimens of all the weeds in the back yard of the office building.

A few months after Merrill's arrival in the Philippines, he was made Botanist of the Bureau of Forestry in addition to his position with the Bureau of Agriculture and divided his time between forestry and agriculture. Various reorganizations of the scientific work in the Philippines resulted in his appointment in 1903 as Botanist, Bureau of Government Laboratories; in 1906 as Botanist, Bureau of Science; in 1919 as Acting Director, Bureau of Science, and a few months later as Director, Bureau of Science. Merrill also served from 1912 to 1918 as Associate Professor, later Professor of Botany, University of the Philippines, on a "half time" basis and taught from eighteen to thirty-six hours a week during the academic year. Soon after his arrival in the Philippines, Merrill decided to prepare a Flora of the Philippines, a project on which he embarked with enthusiasm and determination. The extent of this ambitious project may be realized when the flora of the Philippines is compared with other regions. He estimated the Philippines to contain in excess of 10,000 species, while Great Britain and Ireland have less than 2,500, New Zealand less than 2,000, and the northeastern United States about 4,500. The vast amount of effort necessary to assemble and digest the literature and reference material, to master the problems of nomenclature in the major groups, to collect the plants, to determine their geographical distribution, their relationships and interrelationships, and to prepare descriptions and critical notes on thousands of new species is appalling. In addition, after the first ten years, much of his time and energy was absorbed by his teaching and by his administrative responsibilities, especially as Director of the Bureau of Science.

Most of the scientific and control work for the Philippines was centered in the Bureau of Science, including medical research, public health laboratory work, manufacture of vaccines, organic and inorganic chemistry, standardization of weights and measures, testing of structural materials, geology and mining, fisheries, zoology, ornithology, entomology, botany, plant pathology and physiology, and anthropology. A reporter who interviewed Merrill in 1940 expressed the activities of the Bureau of Science thus: "The Director of the Bureau of Science does everything from telling the public what to do for a dog bite to where to drill for oil."

Merrill increased his staff, trained native collectors, gladly accepted the material collected by the forestry service, arranged contacts abroad, exchanged material, accumulated the essential literature, interested authorities elsewhere in the identification of special groups of plants, and spent considerable time in the field. But in time he realized that the preparation of a descriptive flora was beyond his means and converted the proposed flora into an enumeration of Philippine flowering plants, which was issued between 1922 and 1926 and consisted of 2,136 pages in four volumes. The labor involved in this, though considerably less than that which would have been required for the flora, may be judged from the following figures: 8,120 species were admitted, about 11,200 synonyms were reduced, and 13,600 vernacular names recorded. The review assessed

the specific endemism of the Philippine archipelago, discussed linkages with other floras, and made a valuable contribution to biogeography.

Merrill also came to realize that extra-Philippine material was necessary for good work on the Philippine flora. While numerous exchanges were arranged it became evident that the material most desired could not be secured from those sources alone. He therefore gradually developed extra-Philippine exploration, and between 1910 and 1920 important collections were made by the staff in Indo-China, China, Guam, Borneo, and Amboina.

The desire for extra-Philippine material came partly because of the urgent need for comparative material from adjacent regions and also because some species described earlier by Blanco, Rumphius, and others could not accurately be interpreted in the absence of material from the historical localities in which the collections had been made. Merrill decided that Blanco's numerous and inadequately described species could be more accurately interpreted from general collections made in the regions familiar to Blanco, from which he had secured the actual specimens on which his descriptions were based; there were no specimens extant representing the numerous species he had described and the published descriptions were inadequate. A similar problem existed for Rumphius' Herbarium Amboinense. With the aid of C. B. Robinson, who collected extensively over Blanco's area, Merrill made close acquaintance with the flora of Amboina. He obtained from the Dutch material which connected his knowledge with that of the younger Burman, and for Loureiro he obtained collections from Hue in Annam and visited Canton himself.

This method of identifying previously described plant species by a study of the plant populations from which they had been drawn when the method of using types could not be applied is a landmark in botanical history for, though others had thought of the procedure, as is pointed out by Burkill, none had been able to consummate it.

In addition to the enumeration and critical studies of the species

of Blanco and Rumphius, Merrill prepared a flora of Manila of 490 pages, a systematic enumeration of the plants of Guam, and became involved in the identification of Bornean plants, literature for which was widely scattered. He therefore commenced the preparation of a card catalogue of all references to the Bornean flora by species, which eventually resulted in the publication of a bibliography of Bornean botany containing 479 titles and later a Bibliographic Enumeration of Bornean Plants, a volume of 637 pages.

Merrill also became interested in the flora of southeastern China, making two trips to Canton and one to Nanking, each of one month's duration. Considerable collecting was accomplished, a knowledge of field conditions in eastern and southern China was gained, and botanical research in Chinese institutions was stimulated.

Merrill's administrative position as Director of the Bureau of Science brought him into contact with scientists in fields other than botanical taxonomy. In preparing in 1903 a Dictionary of Philippine Plant Names as an aid to foresters, he noted that American plant names had been brought to the Philippines with American plants and that other names had come from India and China. His travels broadened his outlook and presented problems on plant distribution. These influences and others expanded the region of his interest from the Philippines to the entire Pacific area and even beyond and from plant taxonomy to geology, hydrography and climatology, to those phases of ethno-botany which concerned the origin of cultivated plants in relation to specific civilizations, to certain phases of comparative philology especially Sanskritic, Chinese and Aztec plant names actually used in the Philippines and even to leprosy and its transmission. He became convinced that pre-Columbian agriculture in America was based wholly on native American plants and animals and effectively challenged the extreme diffusionists, those who assumed a single center as the source of civilization. Interest in the origin of cultivated plants and their distribution and in the historical aspects of botany continued throughout his career.

In 1923 Merrill was offered the deanship of the College of Agriculture of the University of California. In spite of the attractions that the Philippines held for him as a field of work, he was on an annual appointment and had the uneasy feeling that there was no future, even as there was no assured tenure nor provision for a retirement pension. He also had his family to consider.

In May, 1907, Merrill had married, in Manila, Mary Augusta Sperry of Illinois and the newly married couple immediately sailed for the United States by way of China and Japan. A few months were spent in Washington, D. C., and a short trip made to New England. On the way back to Manila, about two months were spent at Kew and at the British Museum, followed by visits to Leiden, Berlin, Geneva, and Florence; at each of these places types of Philippine species were examined. By April, 1908, Merrill and his wife were back in Manila. A daughter, Lynne, was born in Manila on February 12, 1909, followed by a son, Dudley Sperry, born on September 21, 1912, and a second son, Wilmans Noyes, born December 21, 1914, who died at the age of less than two months. This tragedy and other considerations induced the Merrills to conclude that Manila was not the proper place to raise a family, and in 1915 when Merrill took a short leave in Washington, D. C., he left his wife and family there when he returned to Manila. He was not to be with his family again for the next eight years, except for a period of accrued leave in 1920-21. In fact, Merrill did not see his daughter, Ann, born in Washington, D. C., August 8, 1916, until she was five years old. If he had had no family responsibilities he would probably have remained in the Philippines, where considerable pressure to retain his services was brought to bear and where his heart lay with the plants of that archipelago. However, he accepted the appointment at California and assumed his new duties in the early part of 1924.

Leonard Wood, Governor-General of the Philippine Islands, wrote Merrill on his departure for California as follows:

"Upon your resignation as Director of the Bureau of Science and your withdrawal from the public service of the Philippine Government, I wish to commend you in the strongest terms and thank you for the work which you have done for the Islands during the long period of service here.

"When I was here as military commander of the Philippines Division from 1905 to 1908 you were keen to participate, and did participate, in various difficult reconnoitering expeditions, involving much hard work and exposure; notably the ascent of some of our highest and most difficult mountains—a work in which you were associated with the late Major Mearns of the Medical Corps of the Army.

"You have done first class work in everything you have attempted and have gained the confidence, respect and support of those with whom you have come in contact. You have done much to build up the insular service and have added a vast amount of valuable information to our knowledge of the flora and fauna of the Islands.

"Your conduct of the Bureau of Science served as an inspiration to all who worked under you and did much to re-establish this institution in public confidence.

"Your resignation results in a great loss to the Philippine public service—one which will be keenly felt and creates a vacancy which will be extremely difficult to fill. You will be missed both officially and personally. I feel that the University of California is to be congratulated on securing your services.

"With every best wish."

(Signed) Leonard Wood Governor-General

Many problems faced Merrill as Dean of the College of Agriculture. There were internal and external dissensions arising in part from rapid growth of the College and in part from a tendency to consider that it was not an integral part of the University. The faculty included approximately 350 individuals, and the annual budget was \$1,800,000. Merrill felt that he lacked experience with academic or research problems in agriculture, and that he knew little of the special problems of the College of Agriculture, and

still less of those peculiar to California. Within less than a year he was made Director of the Agricultural Experiment Station in addition to his duties as Dean of the College of Agriculture.

Merrill stressed that the College of Agriculture was and should continue to be an integral part of the University and that the standards of both instruction and research should be raised. All junior members of the staff were urged and encouraged to undertake graduate work for advanced degrees. Gradually certain divisions were eliminated and the work combined with other existing ones, or new, more comprehensive units were established. Outlying units such as the University Farm at Davis and the Citrus Experiment Station at Riverside were made as autonomous as possible. Promotions were made strictly on merit, new appointments were predicated on fundamental training, with the Ph.D. or its equivalent as a basic requirement in most fields. In research the fundamental aspects were stressed and long-term projects were favored, and the entire curriculum of the College of Agriculture was revised with the aim of a university education on an agricultural basis as opposed to vocational instruction in agriculture.

During the six years that Merrill served as Dean of Agriculture at the University of California, he devoted all his spare time to work on systematic botany and to building up the oriental research herbarium of the University. This work in systematic botany was Merrill's safety valve for, once in the herbarium, early in the morning, at noon, after office hours, or on Sundays and holidays, he immediately forgot his administrative problems. He added some 110,000 sheets to the University herbarium, prepared and published a volume of 316 pages on the flora of Borneo, and wrote numerous short papers on the plants of China, Borneo, and the Philippines.

In 1926 a movement was initiated to establish a botanical garden in Los Angeles and Merrill was asked to become a member of the Garden Foundation. The plan involved the purchase, at a nominal valuation, of a large tract of some 4,500 acres in Mandeville Canyon, Sierra Madre Mountains, which was to be financed by a bond issue.

About 800 acres in the center of the tract were to be retained for development as a botanical garden, which was to be financed from the sale of surrounding acreage for residential purposes. The possibility of the establishment and endowment of a large botanical garden under most advantageous climatic conditions greatly intrigued Merrill, and he accepted the directorship of this embryonic institution on the basis of a part-time leave from the University of California. It soon became evident that the Los Angeles project probably could not be consummated on the basis of the original plans, but Merrill continued his connection with it until he left California at the close of 1929.

In September, 1929, Merrill accepted an appointment as Director of The New York Botanical Garden and Professor of Botany at Columbia University. He felt that most of the specific objectives at California had been accomplished. The perplexing problems of the institution had been settled to a substantial degree; the staff had been increased; material equipment had been greatly enlarged; the annual budget had been augmented. New buildings had been provided and policies established which met with the general support of the industry and of the institution. However, Merrill considered that if his fate was to continue in administrative work he would prefer to do such work in the botanical field and he believed that in New York he would have more time available for botanical work. He felt also that there was an opportunity to make The New York Botanical Garden a still greater institution than it had been. He therefore left California with the pleasant feeling that his departure was regretted by the administration of the University, by the agricultural public and its leaders, by the staff of the University as a whole, and by his immediate colleagues in the College of Agriculture. Dr. C. B. Lipman, Dean of the Graduate Division of the University of California, wrote:

"The resignation of Dr. E. D. Merrill from the position of Dean of the College of Agriculture and Director of the Agricultural Experiment Station at the University of California, is an occasion for

the deepest regret to all those who have the interests at heart of the University in general and of the College of Agriculture in particular. It is given to few men to carry the burdens of an important office with numerous and complicated problems over a period of years, to close their labors in such an office on terms of friendship with all with whom they come in contact and with themselves. Such, however, is strictly true in the case of Dean Merrill. In the period of about six years during which he has held this very important position in the University of California, Dean Merrill has exhibited in high degree a combination of qualities which are rarely found in one individual. His quickness of perception, his unfailing patience and courtesy, his great store of common sense, his promptness in taking action, his approachableness, and consideration of others have won for him the admiration and high esteem of his colleagues in the administration of the University and of those on the faculty. His enviable record as a scientist and administrator are too well known to need repetition here, but four stages of his career may be mentioned as contributing to those fine qualities of leadership to which I have referred above.

"The first of these stages concerns his early life culminating in his graduation at the University of Maine where he attained to the sterling characteristics which characterize the natives of that rugged state; namely, self-reliance, honesty, providence, directness of manner, and industry. The second stage of his career covers a period of some eighteen years as a systematic botanist in the Philippines and neighboring lands. There he learned the value of intensive application and concentration upon the task to which he had set himself of gaining knowledge on tropical flora, culminating in a grasp of that subject which makes him a master and authority in that field of systematic botany and most highly regarded American botanist in the systematic field. In the third stage of his career, to the extent of four or five years, he was concerned in addition to botanical study with directorship of the Bureau of Science in Manila. Here his inherent qualities for successful administration became manifest. There, as at the University of California, he succeeded in solving problems without friction and in earning the devoted friendship of his colleagues and other co-workers. The fourth stage of his career to the present has been as Dean and Director of the College of Agriculture at the University of California, where he has been instrumental in establishing one of the best sets of curricula for a college of agriculture which are available in the United States, and where he has encouraged and stimulated in a sympathetic and most effective manner the prosecution of research on fundamental problems which underlie the science of agriculture.

"It is fitting that as he takes leave of us to take up the exalted position of Director of the New York Botanical Garden, we of the University of California record, not only our deep regret at losing him, but also our profound appreciation of his remarkable contribution to the success and effectiveness of the program of the College of Agriculture, of the scientific activity of the University in general, of our gratitude for the friendship and sympathy which he has shown to his colleagues unfailingly and of the high regard which we all entertain for him as a scholar, a scientist and, above all, a lovable human being. Dean Merrill carries with him to his new position in New York our hearty good wishes for his success during the long life which we all hope still stretches out before him. We wish him Godspeed."

Merrill accepted the appointment as Director of The New York Botanical Garden just before the 1929 depression, with promises of extensive support and with the anticipation of amplifying the work of the institution. He reported after the depression and found himself in an institution inadequately financed with obsolete and wornout equipment and with a heavy overdraft on capital funds used for operating expenses. From a peak income of \$445,000 in 1931 the income was reduced to \$340,000 by 1934. Drastic economies, accomplished by a general reduction in salaries, elimination of positions, and reduction of expenses were necessary. However, beginning in November, 1930, assistance of various types from city, state, and federal relief agencies made it possible to initiate extensive outside

projects covering the general rehabilitation of buildings, grounds, and plantings, and to accomplish a substantial improvement in the library and herbarium. Mounting was speeded up from approximately 10,000 sheets per year to as high as 80,000 sheets, all reserve collections from various parts of the world were sorted, poisoned, mounted, and distributed. The entire herbarium was rearranged. The most significant accomplishment was the policy of incorporating clipped or typed original descriptions and critical notes into the herbarium. Approximately 300,000 of these items were added, thus incorporating library data into the herbarium. Time not required for administrative duties and meeting obligations to various botanical organizations was devoted to accumulating and studying collections of plants from various parts of China, Formosa, India, Siberia, Malaysia, the Philippines, Micronesia, and Polynesia, and to the preparation of numerous papers based on these collections. The largest and most comprehensive of these was that on Louriero, a 450-page quarto volume.

When he came to New York in 1930, Merrill had felt that the move to The New York Botanical Garden was his last and that he was in a position where his absorption with systematic botany could be pursued. However, in 1935 he was offered and accepted an appointment as Professor of Botany and Administrator of Botanical Collections at Harvard University, a new position created for the supervision of the eight separately endowed Harvard botanical units—the Bussey Institution, the Gray Herbarium, the Farlow Herbarium and Library, the Botanical Garden, the Botanical Museum, the Arnold Arboretum (including the Atkins Institution in Cuba), and the Harvard Forest at Petersham. A ninth unit was added in 1937 with the organization of the Maria Moors Cabot Foundation for Botanical Research.

He accepted this appointment with the realization that he would have to give up the marvelous tool for work on oriental botany which he had built in New York, change his personal plans for botanical research, start his career a fifth time under new and unknown surroundings, and for a fourth time undertake a most complex administrative problem involving organization and correlation.

On his departure from The New York Botanical Garden, the Board of Managers passed the following resolution:

"WHEREAS, Dr. Elmer Drew Merrill, Director of The New York Botanical Garden since January 1, 1930, has tendered to the Board of Managers of the Garden his resignation of this post, effective on October 1, 1935, in order to accept appointment as Professor of Botany and Administrator of Botanical Collections at Harvard University, therefore,

"BE IT RESOLVED, by the Managers of The New York Botanical Garden, that they are highly appreciative of the very efficient services that Dr. Merrill has rendered to the Garden during his tenure of office of somewhat more than five and a half years; that they have noted, in particular, the promptness and foresight with which he has secured for the Garden assignment of workers and appropriations of funds by various emergency relief and employment bureaus for general assistance and for much needed repairs and improvements; that they have observed with gratification the development of horticultural features which have made the Garden increasingly attractive to the general public; that they have noted, with wonder and admiration, Dr. Merrill's ability, in spite of exacting executive duties, to continue his systematic studies of Oriental plants, studies which have made him the outstanding leader in this field; that they have observed with satisfaction the honors that have been bestowed upon him by American, foreign and international scientific organizations. While the Managers greatly regret his going, they extend to Doctor Merrill their very best wishes for happiness in his new field and for a most successful continuation of his distinguished career."

A year after his arrival at Harvard, Merrill became also the Arnold Professor of Botany, and in 1937 Director of the Arnold Arboretum.

The purpose of the appointment of an Administrator of Botanical Collections was to draw together the semi-autonomous botanical

institutions at Harvard, eliminate duplication, and enhance their efficiency. For several reasons, mainly the Second World War and resulting uncertainties, the attainment of this objective went slowly.

In the meantime Merrill devoted the major part of his time to increasing the herbarium of the Arnold Arboretum and to research on Asiatic plants. Specimens in unprecedented quantities arrived from China, India, Indo-China, Burma, Siam, the Malay Peninsula, the Philippines, Java, Borneo, Australia, New Guinea, and other parts of the Far East, as well as from Mexico, Central America, the Antilles, and Africa. In a decade the herbarium was increased by 220,000 specimens.

Merrill continued to publish profusely, and in addition edited several facsimile editions of early botanical classics. His early interest in economic and historical botany was reawakened, and he wrote a number of articles dealing with the diffusion of domesticated and cultivated plants. He was also active during the war as a consultant on tropical botany to the Secretary of War, and wrote for the Survival Program of the armed forces a manual of poisonous and food plants of the jungles of the Pacific area.

During the latter part of the war years, a committee of Harvard botanists appointed by Merrill and by Professor Alden Dawson, Chairman of Harvard's Department of Biology, prepared an overall plan to bring Harvard's herbarium and botanical library facilities together in fireproof quarters at Cambridge. This plan was submitted to the Harvard Corporation and accepted. Merrill was at first in favor of the plan, but eventually came to believe that it was not in the best interest of the Arnold Arboretum and opposed it strongly before and after his retirement as Director of the Arnold Arboretum. Notwithstanding his opposition, the final plan was put into effect and a substantial part of the library and herbarium of the Arnold Arboretum was moved to the newly constructed building on the Cambridge campus. This, combined with a lingering illness, made Merrill's final years of life unhappy. He retired from his administrative post in July, 1946, in his seventieth year, but remained

for two years as Arnold Professor of Botany. In 1948 he became Arnold Professor Emeritus, but continued his own research at Harvard and abroad as vigorously as increasing age and failing health permitted.

One of the major contributions during his retirement was *The Botany of Cook's Voyages*. While writing this book he was taken seriously ill and completed the work in 1954 under great difficulties between bouts of illness. The book is a monument to Merrill's determination. It deals critically and mercilessly with the extravagant theories propounded by some writers on the origin and dispersal of certain economic plants.

Merrill received many honors. He was awarded honorary degrees of Doctor of Science from the University of Maine in 1926 and from Harvard University in 1936, Doctor of Letters from the University of California in 1936 and from Yale University in 1951. In 1939 he was given the gold medal of the French Ministry of Agriculture and a diploma from the Société Nationale d'Acclimatation. In the same year the Linnean Society of London, of which he was a Foreign Member, decorated him with its medal, and in 1950 he was awarded the Geoffrey St. Hilaire medal and made a Commander in the Netherlands Order of Oranje Nassau. He was an honorary member of the Deutsche Botanische Gesellschaft, an honorary member of the Netherlands Botanical Society, and a member of the National Academy of Sciences and of the American Philosophical Society. He served as official U. S. delegate to the Fifth Pacific Science Congress in Vancouver in 1933, as President of the Botanical Society of America in 1934, as President of the Section of Taxonomy and Nomenclature of the Sixth International Botanical Congress in Amsterdam in 1936 and of the Seventh in Stockholm in 1950, as Acting President of the American Association for the Advancement of Science in 1931, and as President of the New England Botanical Club, 1937-1939, the American Society of Plant Taxonomists, 1946, and the International Union of Biological Sciences, 1935. He held membership in many scientific societies, including: American Academy of Arts and Sciences (fellow), Philadelphia Academy of Natural Sciences, Académie des Sciences de l'Institut de France (correspondent), Torrey Botanical Club, Sigma Xi, Phi Beta Kappa, Alpha Zeta, Phi Kappa Sigma, Royal Horticultural Society of London, Edinburgh Botanical Society, Royal Society of Edinburgh, Universidad Nacional de La Plata (Académico Honorário), Malayan Branch of the Royal Asiatic Society, Muséum National d'Histoire Naturelle of Paris (correspondent), Nederlandse Botanische Vereniging, Kon. Nederlands Aardrijkskundig Genootschap, Naturhistorisches Museum of Vienna (correspondent), Svenska Vetenskaps Akademien, Institut Genevois, Société Botanique de France, Japanese Botanical Society, Peking Society of Natural History, and Royal Agricultural and Horticultural Society of India. In 1936, he was official guest of Harvard University at its Tercentenary Celebration. For a number of years he was a member of the Latin American Committee of Selection of the John Simon Guggenheim Foundation. He served at various times as a member of the board of directors or as trustee of a number of institutions and societies, such as the Escuela Agricola Panamericana in Honduras, the Gorgas Memorial Institute, the New York Horticultural Society, and the Board of Managers of The New York Botanical Garden.

Merrill was of medium height, slight of build, and blond, in contrast to his twin brother, Dana T., who was tall, and who had very dark eyes and hair. "His voice was sharp and clipped, characterized by a lasting and unmistakable Maine accent; his speech frank and blunt. He was prone to make quick-on-the-spot decisions. From earliest youth he was possessed of an unsatisfiable drive sometimes approaching brashness—the key to his great achievements. It was that drive so characteristic of Maine people—whether they spend their lives on their native farms or whether, like Merrill, they travel to parts foreign. It was that drive which, in an earlier period, sent the Maine clipper ships to all corners of the earth. And there is much in Merrill's career—his urge to see new lands, to seek out the unknown, to build great institutions for future generations—that can

be likened to . . . the spirit of Maine. . . . For, though Merrill left his native habitat early in his career and never returned to practice his profession there, he remained always a State of Mainer" (R. E. Schultes, 1957).

Merrill was a man in a hurry who saw clearly a program of research which absorbed him, but which was greater than any individual could complete within the limits of a single lifetime. The demands of this program possessed him. It led him to make various innovations and modifications of conventional procedures in herbarium methods which increased efficiency in the use of this, for him, essential tool and to advocate briefer citations, one-name periodicals, and other means of economizing time and effort. It induced him, at least in part, to make quick decisions without long consideration of the pros and cons and to act at times without regard to the feelings of others. It occupied his spare time when ordinary men would have found administrative responsibilities more than enough. And yet with all his effort the horizon stretched out beyond his reach. Discussing in his latest book (The Botany of Captain Cook's Voyages) the contribution a study of pre-Linnean herbaria might make towards elucidating the place of origin of a plant species which is now more or less universally distributed, he wrote, "As I close my active career, one of my regrets is that I have not been able to exploit these promising possibilities."

It has been said that Merrill seldom went far below the surface, that he was content in most instances to classify the plants with which he dealt. This type of research was proper for the region he studied and was the only procedure which permitted him to do what he did in his lifetime. It is exactly this characteristic ability to deal superficially with extraordinarily large numbers of plants that makes so apt the epithet "the American Linnaeus" which has been applied to him. Actually, however, Merrill did "go below the surface." He recognized that classification was prerequisite for other investigations and the magnitude of the job he set for himself left little time to pursue anything else. But his studies of the floristic and faunistic

relationships of the Philippines to other Malaysian areas, of the significance of vernacular plant names to the introduction of species, and of the origin of cultivated plants are examples of "below the surface" investigations carried out by Merrill.

In spite of his absorption with his speciality Merrill was not a recluse. Nothing pleased him more than to light his pipe and sit down to talk with a group of gardeners or with a student or his colleagues, mainly, of course, about plants. He played an active part in many organizations and valued the associations he made in them. He joined the Masonic order and eventually became a thirty-third degree Mason. He enjoyed an evening cocktail in his later years, and loved to have visitors and dinner guests. Though he had no hobbies outside his profession, he was interested in sports, especially baseball, football, and tennis. At Manila he was a member of the Columbia Club (eventually its President), and played tennis in the late afternoon, weather permitting. The autobiographical accounts of his adventures in collecting in the Philippines and in China reveal some of the human aspects of his character.

Merrill described over three thousand new species of Philippine, Polynesian, Chinese, Moluccan, and Bornean plants and was the author of more than five hundred technical papers and books. It has been estimated that he was responsible for adding nearly 1,000,000 herbarium specimens to the herbaria of the Bureau of Science of the Philippines, of the University of California, of The New York Botanical Garden, and of the Arnold Arboretum and other units at Harvard University, plus an undetermined number of duplicates distributed to other institutions. At least seven plant genera (Merrillia Swingle, Merrilliobryum Brotherus, Merrilliodendron Kanehira, Merrilliopeltis Hennings, Merrillosphaera Shaw, Sinomerrillia Hu, and Elmerrillia Dandy) are dedicated to Merrill, and some 220 binomials have the specific name dedicated to him. When Merrill referred to these names which immortalized him, he was accustomed, with a twinkle in his eye, to translate Merrilliopeltis as "Merrill's hide."

His energy was boundless. It was his habit, at the University of California, to arrive at the herbarium at 6:00 a.m. and work on shipments of plants until he left for the Dean's office at 9:00 a.m.

His knowledge of plants was prodigious. During the Second World War, soldiers collected plants in areas of the western Pacific and sent them to Merrill for identification, but because of military restrictions the place of collection could not be designated. On the basis of his acquaintance with the plants of the western Pacific, Merrill was frequently able to locate with uncanny accuracy the place from which such collections came. In one instance, for example, he spotted the place of collection on the island of Borneo within an area of fifty miles, an estimate confirmed after military restrictions had been lifted. To see him go through a collection of herbarium specimens from his chosen area and name the majority almost as rapidly as he picked them up was an education in itself.

His interest was not limited to taxonomy as such, but extended to phytogeography, plant migration, the origin and distribution of cultivated plants, and to ornamental horticulture. He played a major part in the introduction to the West in 1948 of *Metasequoia glyptostrobioides*, the "living fossil."

He had a gift for organization which was demonstrated by the administrative posts he held, the critical lists of flora and bibliographies he prepared, and the various improvements he introduced in the organization of herbaria.

He had a keen sense of humor and of the dramatic, and enjoyed telling and emphasizing the pertinent aspects of some incident. At The New York Botanical Garden he insisted on sitting in the front seat of an automobile because that was evidence of rank and "the Director was the rankest member of the staff." His sister-in-law, who confessed that all she knew of cooking was how to boil an egg, was labeled by Merrill thereafter "The Eggster." He fully appreciated the dramatic aspects of his arrival in England with pockets full of seeds of Metasequoia, which he casually pulled out and distributed to botanical associates, and of his discovery in the British Museum of

unnamed remnants of the collections by Banks and Solander made on Captain Cook's first voyage around the world.

Although always ready to help anyone interested in plants, he had no hesitation in speaking frankly, critically, even bluntly. The boy who was "no leader, being naturally too diffident and having little confidence in my own abilities" changed with time to a man who, convinced in his own mind of the rightness of his judgment, had no hesitation in expressing it and fighting for it. This led some to consider him egotistical and vain, and sometimes aroused enmities. The vast majority of his associates recognized, however, that his decisions were not made on petty grounds and admired his drive and dedicated service to botanical science.

His reputation as a brilliant taxonomist, a builder of botanical collections, a dedicated student, and an able administrator was world wide. "... Merrill was an outstanding internationalist in botany.... the full impact of the international emphasis of his work will not wholly be appreciated for a quarter of a century. His influence as an international figure in botany will grow with the passing of the years" (R. E. Schultes, 1957).

His unique library of some 2,600 titles was given to The New York Botanical Garden with the provision that duplicates were to be sold. He requested that the proceeds, plus contributions from friends and associates, be used to establish a fund in his name to finance publication or a medal to be awarded to that individual within the entire field of botany, irrespective of race, creed, or nationality, who was considered to be worthy of such an award. This action was in accord with the interests to which he had devoted his life.

CHRONOLOGY

1876	Born at East Auburn, Maine, on October 15.
1894	Graduated from the Edward Little High School, Auburn, Maine.
	Entered the University of Maine.
1898	B. Sc., University of Maine; Valedictorian.
1899	First paper ("Notes on Maine Plants") published, in Rhodora, Vol. 1.
1898–99	Assistant, Dept. of Natural Science, University of Maine.
1899-1902	Assistant Agrostologist, U. S. Dept. of Agriculture, Washington, D. C.
1900-01	Student at George Washington University, Medical School.
1902-03	Botanist, Bureau of Agriculture and Forestry, Manila, P. I.
1902	Visits to Ceylon and Singapore. First trip to Buitenzorg, Java.
1903	Dictionary of the Plant Names of the Philippine Islands published.
1903-05	Botanist, Bureau of Government Laboratories, Manila, P. I.
1904	M. Sc. degree, University of Maine.
1904	"New and Noteworthy Philippine Plants" series initiated.
1905	Review of Blanco's plant species published.
1906–23	Botanist, Bureau of Science, Manila.
1906	Mount Halcon Expedition, one of a great many exploring expeditions in the Philippines between 1902 and 1923.
1906–23	Philippine Journal of Science established. This was greatly developed and in part edited by Dr. Merrill until he left Manila in 1923.
1907	Married Mary Augusta Sperry, Manila, P. I.—Children: Lynne, Dudley Sperry, Wilmans Noyes (dec.), Ann.
1907-08	First leave while in Manila: nearly three months spent in London,
-9-7 00	engaged in botanical work, with shorter visits to Leiden, Berlin, Geneva, and Florence.
1909	Fellow, American Association for the Advancement of Science.
1912–17	Associate Professor of Botany and Head of the Department, University of the Philippines (half-time appointment).
1912	Flora of Manila published.
1913	C. B. Robinson's Expedition to Amboina planned.
1913	Work on the Guam flora initiated.
19 1 4	Second visit to Buitenzorg, to settle matters concerned with the death of C. B. Robinson in Amboina.
1914	Enumeration of Guam plants published.
1914-15	Second leave while in Manila, spent in Washington, D. C.
1915	Work on the Borneo flora initiated.
1916-17	Collecting trips in Kwangtung Province, China.

1917-19	Professor of Botany, University of the Philippines (half-time appointment).
1917	An Interpretation of Rumphius' Herbarium Amboinense published.
1918	Species Blancoanae published.
1918	First of many papers on the flora of China published.
1919	Acting Director, Bureau of Science, Manila.
1919	Corresponding Member, Malayan Branch, Royal Asiatic Society, Singapore.
1919-23	Director, Bureau of Science, Manila.
1919-23	Professorial Lecturer, University of the Philippines.
1919-23	Editor, Philippine Journal of Science.
1920	Honorary Consulting Botanist, Bishop Museum, Honolulu.
1920	Collecting trip to Anwhei and Chekiang Provinces, China.
1920-21	Third leave. Attended First Pan-Pacific Congress at Honolulu, spent remaining time in California.
1921	Bibliographic Enumeration of Bornean Plants published.
1921	First of many papers on the Hainan flora published.
1922	Fellow, American Academy of Arts and Sciences.
1923	Publication of Enumeration of Philippine Flowering Plants commenced.
1923	First important papers on phytogeography published.
1923	Member, National Academy of Sciences, Washington, D. C.
1923	Corresponding Member, Société des études océannes, Tahiti.
1923	Member, Second Pan-Pacific Science Congress at Melbourne and Sydney, Australia.
1924	Bibliography of Polynesian Botany issued.
1924	Correspondent, Muséum National d'Histoire Naturelle, Paris.
1924	Correspondent, Naturhistorisches Museum, Vienna.
1924	First paper on the Indo-China flora published.
1924	Council Member, Save-the-Redwoods League.
1924–29	Professor of Agriculture and Dean, College of Agriculture, University of California, and Director, Agriculture Experiment Sta-
	tion.
1925-29	Editor, Hilgardia.
1925	Member, Société Botanique de France, Paris.
1925	Corresponding Member, Deutsche Botanische Gesellschaft.
1925	Member, California Academy of Sciences.
1926	Sc. D., University of Maine.
1926	Enumeration of Philippine Flowering Plants finished.
1927	Enumeration of Hainan Plants published.
1927–28	Director, California Botanical Garden, Los Angeles.
1929	Corresponding Member, Peking Society of Natural History.

1930	Vice President and Chairman, Section of Nomenclature, Fifth International Botanical Congress, Cambridge, England.
1930	First important paper on ethnobotany issued.
1930-31	American editor of International Address Book of Botanists.
1930-35	Director, The New York Botanical Garden.
1930-35	Professor of Botany, Columbia University.
1931	Vice President and Chairman, Section G, American Association
75	for the Advancement of Science; Acting President, A.A.A.S. Meeting, December 1931.
1931	Member, Latin American Committee of Selection, Guggenheim Foundation.
1931	Brittonia established. Editor, 1931-35.
1931-35	Trustee, Horticultural Society of New York.
1931	Member, New York Academy of Sciences.
1932	Member, Washington Academy of Sciences.
1932	Ehrenmitglied, Deutsche Botanische Gesellschaft.
1932	Member, American Philosophical Society.
1932	Member, Educational Advisory Board, Guggenheim Foundation.
1932	Correspondent, Academy of Natural Sciences of Philadelphia.
1933	Foreign Member, Linnean Society of London.
1933	Delegate, Fifth Pacific Science Congress, Victoria and Vancouver,
	representing the U. S. Government.
1934	President, Botanical Society of America.
1934	First paper on the Sumatra flora published.
1935	Member, Board of Managers, The New York Botanical Garden.
1935	President, International Union of Biological Sciences.
1935	Honorary Member, Netherlands Botanical Society.
1935	Honorary Member, Royal Horticultural Society of London.
1935	Honorary Member, Pennsylvania Horticultural Society.
1935	President, Section of Taxonomy and Nomenclature, Sixth Inter-
	national Botanical Congress, Amsterdam.
1935	Appointment to Arnold Professorship of Botany, Director of the Arnold Arboretum, and Administrator of Botanical Collections, Harvard University.
1935	Commentary on Loureiro's Flora Cochinchinensis published.
1935	Advisory Editor, Chronica Botanica.
1935	Official delegate to the Sixth International Botanical Congress,
,,,,	Amsterdam, Sept. 2-7, 1935, representing the United States
	Government, also National Academy of Sciences, The New
	York Botanical Garden, A.A.A.S., Bishop Museum, and the New
	York Academy of Sciences. Chairman of the U.S. Government
	and National Academy of Sciences delegations.
1936	President at Large, Herb Society of America.

300	BIOGRAPHICAL MEMOIRS
1936	Honorary Member, Japanese Botanical Society.
1936	LL. D., University of California.
1936	Sc. D., Harvard University.
1936	Official guest of Harvard University at the Tercentenary Cele-
,,	bration.
1936	Member, Board of Managers, Barro Colorado Biological Station.
1937	President, New England Botanical Club.
1937	Polynesian Botanical Bibliography (1773-1935) published.
1937	Académico Honorario, Universidad Nacional de La Plata.
1938	Honorary Member, Kon. Nederlandsch Aardrijkskundig Genoot-
	schap.
1938	Trustee, Massachusetts Horticultural Society.
1938	A Bibliography of Eastern Asiatic Botany (with E. H. Walker) published.
1939	Recipient of the Linnean Gold Medal, Linnean Society of London.
1939	Médaille d'Or awarded by the Société Nationale d'Acclimatation.
1939	First of many papers on the flora of New Guinea and the Solomon Islands published.
1939	Corresponding Member, Institut Genevois.
1940	Associate, Muséum National d'Histoire Naturelle, Paris.
1940	President, Fairchild Tropical Garden, Florida.
1941	Honorary Member, Royal Agricultural and Horticultural Society of India.
1941	First paper on the flora of Burma published.
1941	Arnoldia established.
1942	Work on Index Rafinesquianus initiated.
1942	Sargentia established.
1942-45	Much work concerned with the identification of botanical material sent in by service men scattered from Upper Burma to New Caledonia. Lectured every two months to each incoming group of trainees in the intensive refresher course on tropical medicine, Army Medical School, Washington, D. C., on poisonous and emergency food plants.
1943	Emergency Food Plants published by the U. S. War Department.
1943-45	Consultant to the Secretary of War.
1944	Work on problems in nomenclature of Bartram, Amos Eaton, and Muhlenberg initiated.
1945	Recipient of Appreciation of Services as Consultant to the Secretary of War.
1945	Vice President, International Council of Scientific Unions.
1945	Correspondant, Académie des Sciences de l'Institut de France.
1945	Plant Life of the Pacific World published.
1945	Honorary Foreign Member, Edinburgh Botanical Society.

1946	Honorary Foreign Member, Kungl. Svenska Vetenskapsakademien.
1946	Member, Advisory Scientific Board, Gorgas Memorial Institute.
1946	Member, Board of Directors, Escuela Agrícola Panamericana.
1946	Honorary Fellow, Royal Society of Edinburgh.
1946	A Botanical Bibliography of the Islands of the Pacific published.
1946	Resignation as Director of the Arnold Arboretum accepted, effec-
*9 * *	tive July 31.
1946	Member, Administrative Board, Canal Zone Biological Area.
1946	Member, Pacific Science Council.
1946	Member, Executive Committee, Mass. Forest and Park Assn.
1946	Collaborator, Botanical Garden, Buitenzorg, Java.
1946-48	Arnold Professor of Botany.
1947	Recipient of the George Robert White medal of honor.
1948	Emeritus Professor of Botany.
1948	Commander, Netherlands Order of Oranje Nassau.
1948	Certificate of Appreciation, Federated Garden Clubs of Massachusetts.
1948	Member, Special Commission on Botanical Nomenclature, Utrecht, Holland.
1948	Honorary President, Botanical Section, International Union of Biological Sciences.
1948	President, Section of Nomenclature, Seventh International Botanical Congress, Stockholm. July 7–20.
1948	Grand médaille Geoffrey St. Hilaire, Société nationale d'acclimatation de France.
1949	Corresponding Member, Sociedad de Botanica Cubana.
1950	Vice President, Royal Horticultural Society, London, England.
1950	Honorary President, Plant Science Section, International Associa-
	tion of Biologists.
1951	Honorary Sc. D., 250th Commencement, Yale Univ.
1951	Guggenheim Fellow for work on Malaysian collection, British Museum (Nat. Hist.) July 3–Dec. 15, 1951. Renewed for a second year, 1952.
1071	Member, Board of Trustees, Flora Malesiana Foundation.
1951	Distinguished Service Award, The New York Botanical Garden.
1952 1956	Died, Forest Hills, Mass., February 25.
1950	171cu, 1 01coc 111110, 1710001, 1 cortain, 29.

KEY TO ABBREVIATIONS

Amer. Anthropol. = American Anthropologist

Amer. Fern Jour.=American Fern Journal

Amer. Jour. Bot. = American Journal of Botany

Amer. Nat.=American Naturalist

Amer. Orchid Soc. Bull.=American Orchid Society Bulletin

Amer. Scholar = American Scholar

Ann. Jard. bot. Buitenzorg = Annales du Jardin botanique de Buitenzorg

Arnold Arb. Bull. Pop. Inf.=Arnold Arboretum Bulletin of Popular Information

Bishop Mus. Occ. Pa. = Bishop Museum Occasional Papers

Bot. Gaz. = Botanical Gazette

Bot. Jahrb. = Botanische Jahrbücher

Bot. Mag. Tokyo=Botanical Magazine, Tokyo

Bot. Rev. = Botanical Review

Bull. Bishop Mus. = Bulletin of the Bishop Museum

Bull. Jard. bot. Buitenzorg = Bulletin, Jardin botanique de Buitenzorg

Bull. Soc. bot. France = Bulletin, Société botanique de France

Bull. Torrey Bot. Club=Bulletin of the Torrey Botanical Club

Bur. Sci. Monog. = Bureau of Science Monographs

Bur. Sci. Publ., Manila = Bureau of Science Publications, Manila

Chron. Bot. = Chronica Botanica

Contr. Gray Herb.=Contributions from the Gray Herbarium

Contr. U. S. Nat. Herb.=Contributions from the United States National Herbarium

Fedde Repert.=Fedde, Repertorium specierum Novarum regni vegetabeles

Gard. Bull. Straits Settl. = Garden Bulletin, Straits Settlement

Geog. Rev. = Geographical Review

Jour. Amer. Med. Assn. = Journal of the American Medical Association

Jour. Arn. Arb. = Journal of the Arnold Arboretum

Jour. Bot. = Journal of Botany

Jour. Malay Branch R. As. Soc. = Journal of the Malay Branch of the Royal Asiatic Society

Jour. N. Y. Bot. Gard. = Journal of The New York Botanical Garden

Jour. Roy. Hort. Soc. = Journal of the Royal Horticultural Society

Jour. Straits Branch R. As. Soc. = Journal of the Straits Branch of the Royal Asiatic Society

Jour. Urusvati Himal. Res. Inst.=Journal of Urusvati Himalayan Research Institute

Jour. Wash. Acad. Sci. = Journal of the Washington Academy of Sciences

Lingnan Agric. Rev. = Lingnan Agricultural Review

Lingnan Sci. Jour.=Lingnan Scientific Journal

Meded. Rijks. Herb. Leiden = Mededeelingen van Rijks Herbarium, Leiden Mem. Amer. Acad. Arts Sci. = Memoirs of the American Academy of Arts and Sciences

Mem. Brooklyn Bot. Gard. = Memoirs of the Brooklyn Botanic Garden

Mem. Gray Herb. Harvard Univ.=Memoirs of the Gray Herbarium of Harvard University

Mid-Pacific Mag. = Mid-Pacific Magazine

Mitt. Inst. allgem. Bot. Hamburg = Mitteilungen aus dem Institut für allegemeine Botanik, Hamburg

Mo. Bull. Calif. State Dept. Agric.=Monthly Bulletin of the California State Department of Agriculture

Mo. Bull. Hort. Soc. N. Y.=Monthly Bulletin of the Horticultural Society of New York

Nat. Acad. Sci. Biogr. Mem.=National Academy of Sciences Biographical Memoirs

Nat. Hist.=Natural History

Not. Nat.=Notulae Naturae of the Academy of Natural Sciences of Philadelphia

Off. Reg. Harvard Univ. Reprint=Official Register of Harvard University Reprint

Pacific Sci.=Pacific Science

Pa. Mich. Acad. Sci.=Papers of the Michigan Academy of Science, Arts and Letters

P. I. Bur. Agric. Bull. = Philippine Island Bureau of Agriculture Bulletin

P. I. Bur. Forestry Bull.=Philippine Island Bureau of Forestry Bulletin

P. I. Dept. Agric. Bur. Sci. Pop. Bull. = Philippine Island Department of Agriculture Bureau of Science Popular Bulletin

Phil. Jour. Sci.=Philippine Journal of Science

Proc. Amer. Acad. Arts Sci.=Proceedings of the American Academy of Arts and Sciences

Proc. Amer. Philos. Soc.=Proceedings of the American Philosophical Society Proc. Linn. Soc.=Proceedings of the Linnaean Society

Proc. Linn. Soc. N. S. W.=Proceedings of the Linnaean Society of New South Wales

Proc. Pan-Pacific Sci. Congr. = Proceedings of the Pan-Pacific Scientific Congress

Proc. Roy. Can. Inst.=Proceedings of the Royal Canadian Institute

Proc. Roy. Soc. Queensland = Proceedings of the Royal Society of Queensland

Rept. Phil. Comm. = Report of the Philippine Commission

Rev. Argent. Agron. = Revista Argentina de Agronomía

Rev. Inter. Bot. Appl. Agr. Trop.=Revue Internationale de Botanique Appliquée et d'Agriculture Tropicale

Rev. of Rev. = Review of Reviews

Rev. Sudam. Bot. = Revista Sudamericana de Botánica

Sarawak Mus. Jour. = Sarawak Museum Journal

Sci. Mo. = Scientific Monthly

Trans. Amer. Philos. Soc. = Transactions of the American Philosophical Society Trans. Nat. Hist. Soc. Formosa = Transactions of the Natural History Society of Formosa

- U. S. Dept. Agric. Bur. Pl. Ind.=United States Department of Agriculture Bureau of Plant Industry
- U. S. Dept. Agric. Div. Agrost.=United States Department of Agriculture Division of Agrostology

Univ. Calif. Publ. Bot.=University of California Publications on Botany Yearb. Amer. Philos. Soc.=Yearbook of the American Philosophical Society

BIBLIOGRAPHY

(Prepared with the assistance of Lazella Schwarten)

ARTICLES BY ELMER D. MERRILL

1899

Notes on Maine Plants. Rhodora, 1:185-86.

1900

- A Criticism on Certain New Species of Panicum. Bull. Torrey Bot. Club, 27:593-97.
- A List of Mosses Collected at Katahdin Iron Works, Maine. Rhodora, 2:61-63.

The Occurrence of Thamnolia in Maine. Rhodora, 2:155.

- With F. L. Scribner. Agrostological Notes: The Grasses in the Herbarium of Dr. H. Muhlenberg; Two New Species of Eatonia; A New Variety of Panicum Nashianum; Nomenclature Notes; Notes on Melica and Stipa. U. S. Dept. Agric. Div. Agrost., Circ. 27:1-10.
- With F. L. Scribner. The Grasses in Elliott's Sketch of the Botany of South Carolina and Georgia. U. S. Dept. Agric. Div. Agrost., Circ. 29:1-12, fig. 1-4.
- With F. L. Scribner. The North American Species of Chaetochloa. U. S. Dept. Agric. Div. Agrost., Bull. 21:1-44, fig. 1-24.
- With F. L. Scribner. Notes on Panicum nitidum Lam., Panicum scoparium Lam., and Panicum pubescens Lam. U. S. Dept. Agric. Div. Agrost., Bull. 24:31-38, fig. 8-13.

With F. L. Scribner. Some Recent Collections of Mexican Grasses. U. S. Dept. Agric. Div. Agrost., Bull. 24:1-30, fig. 1-7.

1901

Agrostological Notes: Some Species of Grasses Published by S. B. Buckley; Some Changes in Nomenclature. U. S. Dept. Agric. Div. Agrost., Circ. 35:1-2; 5-6.

With F. L. Scribner. Agrostological Notes: Notes on Calamovilfa; Three New Species of Panicum. U. S. Dept. Agric. Div. Agrost., Circ. 35:2-3; 3-4.

Aristida purpurea Nutt., and Its Allies. U. S. Dept. Agric. Div. Agrost., Circ. 34:1-8.

Some Arizona Grasses. U. S. Dept. Agric. Div. Agrost., Circ. 32:1-10. With F. L. Scribner. The New England Species of the Genus Panicum. Rhodora, 3:93-129.

1902

The North American Species of Spartina. U. S. Dept. Agric. Bur. Pl. Ind., Bull., 9:1-16.

Notes on North American Grasses. Rhodora, 4:142-47.

Notes on Sporobolus. Rhodora, 4:45-49.

Report by the Botanist on an Overland Trip from Manila to Aparri. Rept. Phil. Comm., Exhibit P, pp. 619-27.

Report of the Botanist. Rept. Phil. Comm., Exhibit B, pp. 599-601.

Report of the Botanist on the Royal Botanic Gardens of Ceylon and the Botanic Garden at Singapore. Rept. Phil. Comm., Exhibit Q, pp. 627-30.

With F. L. Scribner. New or Noteworthy North American Grasses. Bull. Torrey Bot. Club, 29:466-70.

1903

Botanical Work in the Philippines. P. I. Bur. Agric. Bull., 5:1-53, front.

A Dictionary of the Plant Names of the Philippine Islands. Bur. Sci. Publ. Manila, 8:1-193.

Flora. In: Louisiana Purchase Exposition. Official Handbook of the Philippines, Part 1, pp. 77-85, 1 pl.

List of Philippine Woods. In: Louisiana Purchase Exposition. Official Handbook of the Philippines, Part 1, pp. 341-57.

Report on Investigations Made in Java in the Year 1902. P. I. Bur. Forestry Bull., 1:1-84, pl. 1-10.

Report of the Botanist. Report of the Secretary of the Interior, Exhibit D, pp. 701-13.

1904

The American Element in the Philippine Flora. Bur. Sci. Publ. Manila, 6:19-36.

New or Noteworthy Philippine Plants. Bur. Sci. Publ. Manila, 6:1-18; II, 17:1-47, pl. 1-3.

1905

The Constituent Species of a Typical Philippine Hill Forest. Bur. Sci. Publ. Manila, 27:57-73. (Proof sheets only, withdrawn from publication.)

New or Noteworthy Philippine Plants, III, Bur. Sci. Publ. Manila, 29: 1-50; IV, 35:1-68.

Notes on Cuming's Philippine Plants in the Herbarium of the Bureau of Government Laboratories. Bur. Sci. Publ. Manila, 35:69-77.

A Review of the Identifications of the Species Described in Blanco's Flora de Filipinas. Bur. Sci. Publ. Manila, 27:1-132.

Some Grasses from Popocatepetl. Contr. U. S. Nat. Herb., 8:287–90. (With an introduction by J. N. Rose.)

The Source of Manila Elemi. Bur. Sci. Publ. Manila, 29:51-55.

1906

An Enumeration of Philippine Gramineae with Keys to the Genera and Species. Phil. Jour. Sci., 1 (Suppl. 1):307–92.

The Flora of the Lamao Forest Reserve. Phil. Jour. Sci., 1 (Suppl. 1): 1-141.

New or Noteworthy Philippine Plants, V. Phil. Jour. Sci., 1 (Suppl. 1): 169-246.

1907

Additional Identifications of the Species Described in Blanco's Flora de Filipinas. Phil. Jour. Sci., Bot. 2:429–36.

The Ascent of Mount Halcon, Mindoro. Phil. Jour. Sci., Sec. A, 2:179-203, map.

The Flora of Mount Halcon, Mindoro. Phil. Jour. Sci., Bot. 2:251-309.

Index to Philippine Botanical Literature. Phil. Jour. Sci., Bot. 2:241-50; II, 2:345-49; III, 2:437-39.

The Occurrence of Antiaris in the Philippines. Phil. Jour. Sci., Bot. 2: 111-12.

Some Genera and Species New to the Philippine Flora. Phil. Jour. Sci., Bot. 2:421-28.

1908

The Genus Radermachera Hassk., in the Philippines. Phil. Jour. Sci., Bot. 3:331-38.

Index to Philippine Botanical Literature, IV. Phil. Jour. Sci., Bot. 3:87–94. New or Noteworthy Philippine Plants, VI. Phil. Jour. Sci., Bot. 3:219–67.

New Philippine Plants from the Collections of Mary Strong Clemens, I. Phil. Jour. Sci., Bot. 3:129-65.

The Oaks of the Philippines. Phil. Jour. Sci., Bot. 3:317-30.

On a Collection of Plants from the Batanes and Babuyanes Islands. Phil. Jour. Sci., Bot. 3:385-442, map.

Philippine Ericaceae. Phil. Jour. Sci., Bot. 3:369-82.

Philippine Freycinetia. Phil. Jour. Sci., Bot. 3:307-15.

The Philippine Plants Collected by the Wilkes United States Exploring Expedition. Phil. Jour. Sci., Bot. 3:73-85, pl. 1-4.

The Philippine Species of Garcinia. Phil. Jour. Sci., Bot. 3:359-68.

With R. A. Rolfe. Notes on Philippine Botany. Phil. Jour. Sci., Bot. 3: 95-127.

1909

Index to Philippine Botanical Literature, V. Phil. Jour. Sci., Bot. 4:677-85. The Malayan, Australasian and Polynesian Elements in the Philippine Flora. Ann. Jard. bot. Buitenzorg, 2 (Suppl. III):277-306.

Medical Survey of the Town of Taytay. Part V. The Principal Foods Utilized by the Natives. Phil. Jour. Sci., B. Med. Sci. 4:219-23.

New or Noteworthy Philippine Plants, VII. Phil. Jour. Sci., Bot. 4:247–330. A Preliminary Revision of Philippine Combretaceae. Phil. Jour. Sci., Bot. 4:641–50.

A Revision of Philippine Connaraceae. Phil. Jour. Sci., Bot. 4:117-28.

A Revision of Philippine Loranthaceae. Phil. Jour. Sci., Bot. 4:129-53.

1910

Catalogue of the Plants Cultivated in the City Nursery at Cementerio del Norte. Manila, P. I., Philippine Islands Bureau of Printing. 40 pp.

An Enumeration of Philippine Leguminosae, with Keys to the Genera and Species. Phil. Jour. Sci., Bot. 5:1-136.

Index to Philippine Botanical Literature, VI. Phil. Jour. Sci., Bot. 5: 259-66.

New or Noteworthy Philippine Plants, VIII. Phil. Jour. Sci., Bot. 5: 167–257.

Prospectus. Plantae insularum Philippinensium. 4 pp.

With M. L. Merritt. The Flora of Mount Pulog. Phil. Jour. Sci., Bot. 5: 287-403, pl. 1-4, map.

With F. L. Scribner. The Grasses of Alaska. Contr. U. S. Nat. Herb., 13: 47-92, pl. 15, 16.

1011

The Philippine Species of Begonia. Phil. Jour. Sci., Bot. 6:369-406.

1912

A Descriptive Catalogue of the Plants Cultivated in the City Nursery at the Cementerio del Norte, 2nd ed. Manila, P. I., Philippine Islands Bureau of Printing. 62 pp., 12 pls.

A Flora of Manila. Bur. Sci. Publ. Manila, 5:1-490.

Review of Exkursionsflora von Java umfassend die Blütenpflanzen mit besonderer Berücksichtigung der im Hochgebirge wildwachsende Arten, by S. H. Koorders. Phil. Jour. Sci., Bot. 7:359-61.

New or Noteworthy Philippine Plants, IX. Phil. Jour. Sci., Bot. 7:259–357. Nomenclatural and Systematic Notes on the Flora of Manila. Phil. Jour. Sci., Bot. 7:227–51.

Notes on Philippine Euphorbiaceae. Phil. Jour. Sci., Bot. 7:379-410.

Notes on the Flora of Manila with Special Reference to the Introduced Element. Phil. Jour. Sci., Bot. 7:145–208.

On the Identity of Evodia triphylla DC. Phil. Jour. Sci., Bot. 7:373-78.

The Pineda Monument and the Probable Site of the First Botanic Garden in the Philippines. Phil. Jour. Sci., Bot. 7:363-69, pl. 22.

Sertulum Bontocense; New or Interesting Plants Collected in Bontoc Subprovince, Luzon, by Father Morice Vanoverbergh. Phil. Jour. Sci., Bot. 7:71-107.

1913

The Botanical Exploration of Amboina by the Bureau of Science, Manila. Science, n. s., 39:499-502.

Philippine Shade Trees and Ornamental Plants, Their Planting and Care. Bureau Public Works Quarterly Bulletin, 2:34-41.

Plantae Wenzelianae. Phil. Jour. Sci., Bot. 8:363-90.

Studies on Philippine Melastomataceae, I. Phil. Jour. Sci., Bot. 8:207–50; II. Phil. Jour. Sci., Bot. 8:335–61, pl. 11, 12.

Studies on Philippine Rubiaceae, I. Phil. Jour. Sci., Bot. 8:31-63, pl. 1.

1914

Charles Budd Robinson, Jr. Phil. Jour. Sci., Bot. 9:191-97.

Dilleniaceae novae. Phil. Jour. Sci., Bot. 9:517-30.

An Enumeration of the Plants of Guam. Phil. Jour. Sci., Bot. 9:17-155.

Lijst der door Dr. C. B. Robinson in Amboina, op den berg Batoe Gadjah in het Rumphius-Natuurmonument, in Augustus 1914 verzamelde planten. Nederl. Ind. Vereenig. Natuurbescherming Eerste Jaarverslag 1912–13, pp. 135–37.

Meliaceae novae. Phil. Jour. Sci., Bot. 9:531-41.

New or Noteworthy Philippine Plants, X. Phil. Jour. Sci., Bot. 9:261-337.

Notes on Philippine Euphorbiaceae, II. Phil. Jour. Sci., Bot. 9:461-93.

Plantae Wenzelianae, II. Phil. Jour. Sci., Bot. 9:353-89.

Sertulum Bontocense; New or Interesting Plants Collected in Bontoc Subprovince, Luzon, by Father Morice Vanoverbergh, II. Phil. Jour. Sci., Bot. 9:443–59.

1915

A Contribution to the Bibliography of the Botany of Borneo. Sarawak Mus. Jour., 2:99–136.

Genera and Species Erroneously Credited to the Philippine Flora. Phil. Jour. Sci., Bot. 10:171-94.

New or Noteworthy Philippine Plants, XI. Phil. Jour. Sci., Bot. 10:1-84; XII. Phil. Jour. Sci., Bot. 10:287-349.

New Species of Eugenia. Phil. Jour. Sci., Bot. 10:207-25.

New Species of Schefflera. Phil. Jour. Sci., Bot. 10:195-205.

On the Application of the Generic Name Nauclea of Linnaeus. Jour. Wash. Acad. Sci., 5:530-42.

Plantae Wenzelianae, III. Phil. Jour. Sci., Bot. 10:265-85.

The Present Status of Botanical Exploration of the Philippines. Phil. Jour. Sci., Bot. 10:159–70, map.

A Simple Method of Making Carbon Leaf Impressions. Torreya, 15:175-81, fig. 1-3.

Studies on Philippine Anonaceae, I. Phil. Jour. Sci., Bot. 10:227–64. Studies on Philippine Rubiaceae, II. Phil. Jour. Sci., Bot. 10:99–144.

1916

Korthalsella, Bifaria, and Pseudixus. Bot. Mag. Tokyo, 30:66-68. New or Interesting Philippine Vitaceae. Phil. Jour. Sci., Bot. 11:125-45. New Plants from Samar. Phil. Jour. Sci., Bot. 11:175-206. New Plants from Sorsogon Province, Luzon. Phil. Jour. Sci., Bot. 11:1-35.

Notes on the Flora of Borneo. Phil. Jour. Sci., Bot. 11:49-100.

On the Identity of Blanco's Species of Bambusa. Amer. Jour. Bot., 3:58-64. On the Utility of Field Labels in Herbarium Practice. Science, n. s., 44: 664-70.

Osbeck's Dagbok öfwer en Ostindsk Resa. Amer. Jour. Bot., 3:571-88.

Reliquiae Robinsonianae. Phil. Jour. Sci., Bot. 11:243-319.

The Systematic Position of the "Rain-Tree," Pithecolobium Saman, Jour. Wash. Acad. Sci., 6:42-48.

1917

Alabastra Borneensia. Jour. Straits Branch R. As. Soc., 77:189–247.

Contributions to Our Knowledge of the Flora of Borneo. Jour. Straits Branch R. As. Soc., 76:75–117.

The Dates of Publication of the Third Edition of Blanco's Flora de Filipinas. Phil. Jour. Sci., Bot. 12:113–16.

An Interpretation of Rumphius' Herbarium Amboinense, Bur. Sci. Publ. Manila, 9:1–595, maps.

Koordersiochloa javanica Merrill, a New Genus and Species of Gramineae from Java. Phil. Jour. Sci., Bot. 12:67-71, pl. 1.

New Philippine Lauraceae. Phil. Jour. Sci., Bot. 12:125-41.

New Philippine Melastomataceae. Phil. Jour. Sci., Bot. 12:337-60.

New Philippine Myrsinaceae. Phil. Jour. Sci., Bot. 12:143-58.

New Philippine Shrubs and Trees. Phil. Jour. Sci., Bot. 12:263-303.

Notes on the Flora of Kwangtung Province, China. Phil. Jour. Sci., Bot. 12:99-111.

Studies on Philippine Rubiaceae, III. Phil. Jour. Sci., Bot. 12:159-76.

Two New Genera and Four New Species of Philippine Compositae. Phil. Jour. Sci., Bot. 12:117-24, pl. 1-3.

Type, Cotype, and Topotype Labels. Torreya, 17:13-15, fig. 1-3.

With W. H. Brown and H. S. Yates. The Revegetation of Volcano Island, Luzon, Philippine Islands, Since the Eruption of Taal Volcano in 1911. Phil. Jour. Sci., Bot. 12:177–248, pl. 4–16.

1918

Description of a New Species of Pollinia in Java. Bull. Jard. bot. Buitenzorg III, 1:16.

New or Noteworthy Philippine Plants, XIII. Phil. Jour. Sci., Bot. 13:1-66; XIV, 13:263-333.

New Species of Bornean Plants. Phil. Jour. Sci., Bot. 13:67-122.

Notes on the Flora of Loh Fau Mountain, Kwangtung Province, China. Phil. Jour. Sci., Bot. 13:123-61.

Oreomyrrhis borneenis Merr. sp. nov., an Interesting Addition to Our Knowledge of the Malayan Flora. Amer. Jour. Bot., 5:514–15, pl. 36.

Species Blancoanae. A Critical Revision of the Philippine Species of Plants Described by Blanco and by Llanos. Bur. Sci. Publ. Manila, 12:1-423, map.

1919

Additional Notes on the Kwangtung Flora. Phil. Jour. Sci., 15:225–61. Additions to the Flora of Guam. Phil. Jour. Sci., 15:539–44.

The Bornean Species of Eugenia, Schefflera and Saurauia, Represented in the Singapore Herbarium. Jour. Straits Branch R. As. Soc., 79:19–35.

New or Noteworthy Philippine Plants, XV. Phil. Jour. Sci., 14:365-457.

Notes on the Flora of Sumatra. Phil. Jour. Sci., 14:239-50.

On the Application of the Generic Name Melodorum of Loureiro. Phil. Jour. Sci., 15:125-37.

On the Identity of Polypodium spinulosum Burm. f. Proc. Linn. Soc. N. S. W., 44:353-54.

With W. H. Brown. Philippine Palms and Palm Products. P. I Bur. Forestry Bull., 18:1-129, pl. 1-14.

With H. A. Lee. The Susceptibility of a Non-rutaceous Host to Citrus Canker. Science, n. s., 49:499–500.

With W. H. Wade. The Validity of the Name Discomyces for the Genus of Fungi Variously Called Actinomyces, Streptothrix, and Nocardia. Phil. Jour. Sci., 14:55-69.

1920

Camphorina vs. Cinnamomum. Bot. Gaz., 70:84-85.

Comments on Cook's Theory as to the American Origin and Prehistoric Polynesian Distribution of Certain Economic Plants, Especially Hibiscus tiliaceus Linnaeus. Phil. Jour. Sci., 17:377–84.

Eighteenth Annual Report of the Director of the Bureau of Science, Philippine Islands, for the Year Ending Dec. 31, 1919. 79 pp.

Myrmeconauclea, a New Genus of Rubiaceous Plants from Palawan and Borneo. Phil. Jour. Sci., 17:375–76.

A New Genus of Myrsinaceae from the Philippines. Phil. Jour. Sci., 17: 605-6.

New or Noteworthy Philippine Plants, XVI. Phil. Jour. Sci., 17:239-323.

Notes on Philippine Euphorbiaceae, III. Phil. Jour. Sci., 16:539-79. On the Identity of Aegiphila viburnifolia Jussieu. Phil. Jour. Sci., 16:449-53, pl. 1.

Studies on Philippine Rubiaceae, IV. Phil. Jour. Sci., 17:425-85.

1921

A Bibliographic Enumeration of Bornean Plants. Jour. Straits Branch R. As. Soc., Special Number, pp. 1–637.

New Philippine Moraceae. Phil. Jour. Sci., 18:49-69.

New Philippine Myrtaceae. Phil. Jour. Sci., 18:289-308.

A Review of the New Species of Plants Proposed by N. L. Burman in His Flora Indica. Phil. Jour. Sci., 19:329–88.

Two New Species of Plants from Hainan. Phil. Jour. Sci., 19:677-79.

1922

Additions to Our Knowledge of the Bornean Flora, Phil, Jour, Sci., 21: 515-34.

The Bureau of Science and the Practical Value of its Work. National Forum, 1:20–33.

Diagnoses of Hainan Plants. Phil. Jour. Sci., 21:337-55.

New or Noteworthy Bornean Plants. Part I. Jour. Straits Branch R. As. Soc., 85:151–201; Part II. Jour. Straits Branch R. As. Soc., 86:312–42.

New or Noteworthy Philippine Plants, XVII. Phil. Jour. Sci., 20:367–476. Notes on the Flora of Southeastern China. Phil. Jour. Sci., 21:491–513.

Twentieth Annual Report of the Bureau of Science, Philippine Islands, for the Year Ending Dec. 31, 1921. 83 pp., 4 pls.

1923

Correctiones ad Elaeocarpus Genus. Fedde Repert., 19:235.

Diagnoses of Hainan Plants, II. Phil. Jour. Sci., 23:237-68.

Die pflanzengeographische Scheidung von Formosa und den Philippinen. Bot. Jahrb., 58:599-604.

Distribution of the Dipterocarpaceae. Origin and Relationships of the Philippine Flora and Causes of the Differences between the Floras of Eastern and Western Malaysia. Phil. Jour. Sci., 23:1-33, pl. 1-8.

An Enumeration of Philippine Flowering Plants. Bur. Sci. Publ. Manila, No. 18. Vol. 1, vii+463 pp. (1923-25); vol. 2, 530 pp. (1923); vol. 3, 628 pp. (1923); vol. 4, 515 pp., 6 pls., 3 figs., (1926).

New or Noteworthy Bornean Plants. Part III. Jour. Malay Branch R. As. Soc., 1:22-45.

Sandoricum Koetjape and Dendrobium caninum. Jour. Bot., 61:172-74. Twenty-first Annual Report of the Bureau of Science, Philippine Islands, for the Year Ending Dec. 31, 1922. 65 pp., 2 pls.

1924

Bibliography of Polynesian Botany. Bull. Bishop Mus., 13:1-68.

The Food Problem in Malay Land. Mid-Pacific Mag., 28:547-54.

New Species of Plants from Indo-China. Univ. Calif. Publ. Bot., 10:423-30. Plants from Banguey Island. Phil. Jour. Sci., 24:113-16.

Report of the Agricultural Experiment Station of the University of California from July 1, 1923, to June 30, 1924. 84 pp.

With H. A. Lee. A Consideration of the Species Citrus maxima (Burm.) Merrill. Amer. Jour. Bot., 11:382-84, figs. 1, 2.

1925

Additions to Our Knowledge of the Flora of Hainan. Jour. Arn. Arb., 6: 129-40.

Additions to Our Knowledge of the Philippine Flora, I. Phil. Jour. Sci., 26:447-96.

An Appeal for Simplified Literature Citations. Science, n. s., 62:419-20. Explanatory Note. Hilgardia 1:i-ii.

Five New Species of Chinese Plants. Phil. Jour. Sci., 27:161-66.

New Species of Philippine Plants Collected by A. Loher. Phil. Jour. Sci., 27:21-59.

1926

Additions to Our Knowledge of the Bornean Flora, II. Phil. Jour. Sci., 30:79-87.

Additions to Our Knowledge of the Philippine Flora, II. Phil. Jour. Sci., 29:475-96, 1 pl.; III. Phil. Jour. Sci., 30:389-430.

Bibliography of Polynesian Botany (Abstract). Proc. Pan-Pacific Sci. Congr. (Australia), 1923, 1:329.

The Correlation of Biological Distribution with Geological History of Malaysia. Proc. Pan-Pacific Sci. Congr. (Australia), 1923, 2:1148-55, map.

A Discussion and Bibliography of Philippine Flowering Plants. (Reprinted from Enum. Philip. Fl. Pl., vol. 4.) P. I. Dept. Agric. Bur. Sci. Pop. Bull., 2:1-239, pl. 1-6.

An Economical Herbarium Case. Torreya, 26:50-54, fig. 1, 2.

An Efficient and Economical Herbarium Paste. Torreya, 26:63-65.

The Field Label in Botanical Exploration Work (Abstract). Proc. Pan-Pacific Sci. Congr. (Australia), 1923, 1:321-22.

The Flora of Banguey Island. Phil. Jour. Sci., 29:341-429, 1 fig.

Hugh Cuming's Letters to Sir William J. Hooker. Phil. Jour. Sci., 30: 153-85, 1 pl.

The Influence of the Australian Flora on the Flora of the Philippines, with an Explanation of the Anomalous Distribution of Australian Types in Malaysia (Abstract). Proc. Pan-Pacific Sci. Congr. (Australia), 1923, 1:323-24.

New Species of Plants from Indo-China, II. Univ. Calif. Publ. Bot., 13: 127-43.

Report of the Agricultural Experiment Station of the University of California from July 1, 1924, to June 30, 1925. 78 pp.

Report of the Agricultural Experiment Station of the University of California from July 1, 1925 to June 30, 1926. 102 pp.

Sur la synonymie et la distribution du Chloris tenera (Presl) Scribn. Bull. Soc. Bot. France, 73:27-30.

With R. E. Dickerson *et al.* Floristic and Faunistic Provinces and Subprovinces of the Philippines (Abstract), Proc. Pan-Pacific Sci. Congr. (Australia), 1923, 1:330-31.

1927

An Enumeration of Hainan Plants. Lingnan Sci. Jour., 5:1-186.

New Chinese Ligneous Plants. Jour. Arn. Arb., 8:3-19.

Report of the Agricultural Experiment Station of the University of California from July 1, 1926 to June 30, 1927. 110 pp.

Swinglea, a New Generic Name in the Rutaceae. Jour. Arn. Arb., 8:131-32. Unrecorded Plants from Kwangtung Province. Lingnan Agr. Rev., 4:119-36.

1928

The California Botanic Garden. Madroño, 1:163-64.

A Collection of Plants from Sarawak. Sarawak Mus. Jour., 3:513-57.

Flora of the Philippines. (Reprinted as Distribution of Life in the Philippines.) Bur. Sci. Monog., 21:130-68, pl. 13-22.

The Identity of the Genus Sarcodum Loureiro. Jour. Bot., 66:264-65.

Nomenclatural Notes on Philippine Plants. Phil. Jour. Sci., 35:1-9.

On the Type of Rhus javanica Linnaeus. Jour. Arn. Arb., 9:1-4, pl. 10, 11.

Some Polynesian Botanical Problems of Fundamental Importance. Proc. Third Pan-Pacific Sci. Congr., Tokyo, 1926, pp. 889–93.

With R. E. Dickerson *et al.* Distribution of Life in the Philippines. Bur. Sci. Monog., 21:1-322, fig. 1-61, pl. 1-42.

With E. Quisumbing. New Philippine Plants. Phil. Jour. Sci., 37:133-213, pl. 1-4.

1929

Cooperation with Organized Agricultural Producers. Proc. Forty-second Convention of the Association of Land-Grant Colleges and Universities, 1928, pp. 101-4.

Leprosy Bows to Science. Rev. of Rev., 80(478):79-80.

A New Philippine Species of Chloris. Phil. Jour. Sci., 40:181-82.

Pacific Botanical Survey. Bull. Bishop Mus., 65:1-4.

Plantae Elmerianae Borneenses. Univ. Calif. Publ. Bot., 15:1-316.

A Plea for High Standards of Instruction in Agriculture. Proc. Forty-second Convention of the Association of Land-Grant Colleges and Universities, 1928, pp. 135-41.

Recent Research Demands on the College of Agriculture. Mo. Bull. Calif. State Dept. Agric., 18:147-51.

Report of the Agricultural Experiment Station of the University of California from July 1, 1927, to June 30, 1928. 127 pp.

1930

A "Big Tree" Section Reaches the Garden. Jour. N. Y. Bot. Gard., 31:252-53, 1 fig.

Botanical Exploration of Borneo. Jour. N. Y. Bot. Gard., 31:185-91.

Le genre Tolbonia O. Kuntze synonyme de Calotis. Bull. Soc. Bot. France, 77:340-41.

The Improbability of Pre-Columbian Eurasian-American Contacts in the Light of the Origin and Distribution of Cultivated Plants. Jour. N. Y. Bot. Gard., 31:209-12.

An International Botanical Address-Book. Science, n. s., 72:652.

On Miquel's Kwangtung Species as Based on Krone's Collection. Sunyatsenia, 1:1-48, pl. 1-20.

The Origin of Civilization in Relation to the Origin of Cultivated Plants. Jour. N. Y. Bot. Gard., 31:149.

The Philippine Islands, Jour. N. Y. Bot. Gard., 31:201-3.

The Progress of Science. The Fifth International Botanical Congress. Sci. Mo., 31:565-68, 1 fig.

Report of the Agricultural Experiment Station of the University of California from July 1, 1928, to June 30, 1929. 123 pp.

A Supplementary List of Hainan Plants. Lingnan Sci. Jour., 6:271-89.

A Second Supplementary List of Hainan Plants. Lingnan Sci. Jour., 6: 323-32.

A Third Supplementary List of Hainan Plants. Lingnan Sci. Jour., 9: 35-44.

Tobacco in New Guinea. Amer. Anthropol., 32:101-5.

With W. Y. Chun. Contributions to Our Knowledge of the Kwangtung Flora. Sunyatsenia, 1:49–84.

1931

An Appreciation of the Rijks Herbarium. Meded. Rijks Herb. Leiden, 65:1-3.

The Local Resident's Opportunity for Productive Work in the Biological Sciences in China. Lingnan Sci. Jour., 7:293–96.

One Name Periodicals. Brittonia, 1:1-5.

Photostat Service at the New York Botanical Garden. Jour. N. Y. Bot. Gard., 32:291-92.

The Phytogeography of Cultivated Plants in Relation to Assumed Pre-Columbian Eurasian-American Contacts, Amer. Anthropol., 33:375–82.

A Plea for the Preparation of a Bibliography of the Flora of China. Rep. Proc. Fifth Int. Bot. Congr., pp. 528-33.

Report of the Secretary and Director-in-Chief for the year 1930. Bull. N. Y. Bot. Gard., 14:253-304.

Section of "Big Tree" on Exhibit in the Museum of The New York Botanical Garden. Jour. N. Y. Bot. Gard., 32:240-42, 1 fig.

Unrecorded Plants for Kwangtung Province, II. Lingnan Sci. Jour., 7: 297-326.

Urusvati Brings America New Botanical Treasures, Jour. Urusvati Himal. Res. Inst., 1:87–88.

With L. Diels and T. F. Chipp. International Address Book of Botanists, Being a Directory of Individuals and Scientific Institutions, Universities, Societies, etc., in All Parts of the World Interested in the Study of Botany. London, Published for The Bentham Trustees by Baillière, Tindall & Cox. xv+605 pp.

1932

Coöperation with the Roerich Museum, Jour. N. Y. Bot. Gard., 33:21-23. Crops and Civilizations. Sci. Mo., 34:362-65.

The Elizabeth Estes Bigelow Memorial. Jour. N. Y. Bot. Gard., 33:123-25, fig. 1, 2.

Factors To Be Considered in Interpreting Loureiro's Species. Jour. N. Y. Bot. Gard., 33:32-36.

A Fourth Supplementary List of Hainan Plants. Lingnan Sci. Jour., 11: 37-61.

Garden Coöperates with G. Proctor Cooper, 3rd, Sailing This Month on Caribbean Survey. Jour. N. Y. Bot. Gard., 33:237-38.

Index Kewensis in Loose-leaf Ledger Form. Jour. N. Y. Bot. Gard., 33: 268-71, 1 fig.

On the Desirability of an Actual Examination of Extant Types of Chinese Species. Sinensia Spec. Bull., 1. 10 pp.; republished, Sinensia, 3:53-62.

Photostat Copies of Charles Darwin's Letters in Cox Collection Sent to Down House. Jour. N. Y. Bot. Gard., 33:14-16.

Report of the Secretary and Director-in-Chief for the year 1931. Bull. N. Y. Bot. Gard., 14:305–52.

Sixty-pound Corm Received from Sumatra. Jour. N. Y. Bot. Gard., 33:155. The So-called Chinese Evergreen—Aglaonema modestum. Jour. N. Y. Bot. Gard., 33:93-97, fig. 1.

Solanum sanitwongsei. Addisonia, 17:43-44, pl. 566.

With F. P. Metcalf. New Vitaceae from Fukien. China. Lingnan Sci. Jour., 11:101-3.

With E. Quisumbing. Begonia Wadei. Addisonia, 17:57-58, pl. 573.

1933

Crops and Civilization, Cultivated Plants and the Origins of Civilizations. Nat. Hist., 33:235-50, illus.

Crops and Civilizations. Bull. Torrey Bot. Club, 60:323-29.

Eastern Asia as a Source of Ornamental Plants. Jour. N. Y. Bot. Gard., 34:238–43; republished in Proc. Ninth National Shade Tree Conference, pp. 41–46.

The Generic Name Parsonsia and the Status of Parsonsia helicandra Hooker & Arnott. Brittonia, 1:233-37.

Review of Jungle Memories. Jour. N. Y. Bot. Gard., 34:248-49.

Loureiro and His Botanical Work. Proc. Amer. Philos. Soc., 72:229-39.

On Poa malabarica Linnaeus. Bull. Torrey Bot. Club, 60:633-38.

Plant Forms in Ornament. Jour. N. Y. Bot. Gard., 34:203-5.

State Flowers. Jour. N. Y. Bot. Gard., 34:152-55.

Systematic Botany and Forestry. In: Dedication of the Louis Marshall Memorial, February 23, 1933 (New York State College of Forestry, Syracuse, N. Y.), pp. 23-29.

1934

Annual Report of the Director for the year 1933. Jour. N. Y. Bot. Gard., 35:65-81.

The Elizabeth Gertrude Britton Moss Herbarium Is Established. Jour. N. Y. Bot. Gard., 35:210–11.

An Enumeration of Plants Collected in Sumatra by W. N. and C. M. Bangham. Contr. Arn. Arb., 8:1-178, fig. 1, pl. 1-14.

A Fifth Supplementary List of Hainan Plants. Lingnan Sci. Jour., 13: 53-73.

The Gymnosperms of Malaysia, the Philippines, and Polynesia. Proc. Fifth Pacific Sci. Congr., pp. 3267-71.

Los nombres genéricos Parsonsia y Cuphea. Rev. Sudam. Bot., 1:97-99.

New Sumatran Plants, I. Pa. Mich. Acad. Sci., 1933, 19:149-203, pl. 16-35.

The Problem of Economic Plants in Relation to Man in Pre-Columbian America. Proc. Fifth Pacific Sci. Congr., 759-67.

The Republication of Fundamental Botanical Works of Japan. Jour. N. Y. Bot. Gard., 35:254-55.

The Significance of the Compiler's Data in Field Work. Bull. Torrey Bot. Club, 61:71-74.

Some Additional Kwangtung Plants. Sunyatsenia, 1:189-207, pl. 34.

To the Memory of Dr. Bunzo Hayata. Trans. Nat. Hist. Soc. Formosa, 24:389-90.

Unrecorded Plants for Kwangtung Province, III. Lingnan Sci. Jour., 13: 15-52, pl. 4-8.

With W. Y. Chun. Additions to Our Knowledge of the Hainan Flora. Sunyatsenia, 2:23–48, pls. 13, 14.

With W. Y. Chun. Contributions to Our Knowledge of the Kwangtung Flora (2). Sunyatsenia, 2:3-22, pls. 1-12, figs. 1-3.

1935

Additions and Corrections to Ridley's Flora of the Malay Peninsula. Gard. Bull. Straits Settl., 8:131-33.

Aglaonema modestum. Addisonia, 19:5-6, pl. 611.

Agricultura y civilización. La Hacienda Año, 28:253-56, illus.

Annual Report of the Director for the Year 1934. Jour. N. Y. Bot. Gard., 36:77–93.

The Atkins Institution. Harvard Alumni Bull., May 10, pp. 939-41.

Benjamin Lincoln Robinson. Science, n. s., 82:142-43.

Botany at Harvard University. Sci. Mo., 41:469-73, illus.

A Commentary on Loureiro's Flora Cochinchinensis. Trans. Amer. Philos. Soc. II., 24(2):1-445.

The Cost of German Scientific Journals. Science, n. s., 81:316.

Cystopteris fragilis or C. Filix-fragilis? Amer. Fern Jour., 25:127-31.

International Coöperation among Botanists. Chron. Bot., 1:5-6.

Kenneth Kent Mackenzie, 1877-1934. Proc. Linn. Soc., 147:184-85.

Loureiro e a sua obra botânica, tradução de P. E. Cavique Santos. Agros, II., 18:1-15.

Nathaniel Lord Britton. 1859–1934. Proc. Linn. Soc., 147:161–65.

New Sumatran Plants, II. Pa. Mich. Acad. Sci., 1934, 20:95-112.

Proceedings of the International Botanical Congress. Jour. N. Y. Bot. Gard., 36:253-54.

A Sixth Supplementary List of Hainan Plants. Lingnan Sci. Jour., 14: 1-62, fig. 1-18.

Some Malaysian Phytogeographical Problems. Gard. Bull. Straits Settl., 9:49-57.

Where Our Food Plants Came From. Torreya, 35:25-30, 1 pl.; reprinted in Girl Scout Leader, 12:4, 10, illus.

With W. Y. Chun. Additions to Our Knowledge of the Hainan Flora, II. Sunyatsenia, 2:203-332, pl. 36-71, fig. 22-47.

With E. Quisumbing. Styrax in the Philippines. Phil. Jour. Sci., 56: 313-17, 1 pl.

1936

The Arnold Arboretum during the Fiscal Year Ended June 30, 1936. Jour. Arn. Arb., 17:357–69.

The Identity of Convolvulus reptans Linnaeus. Phil. Jour. Sci., 59:451-53, 1 pl.

Malaysian Phytogeography in Relation to the Polynesian Flora. In: T. H. Goodspeed, ed., Essays on Geobotany in Honor of William Albert Setchell, pp. 247-61.

Miscellaneous Notes on Philippine Botany. Phil. Jour. Sci., 60:27-35.

A New Philippine Species of Cycas. Phil. Jour. Sci., 60:233-39, pl. 1-4.

On the Application of the Binomial Amaranthus viridis Linnaeus. Amer. Jour. Bot., 23:609–12, 1 fig.

Otto Kuntze's New Genera and New Species of Indo-China Plants. Brittonia, 2:189-200.

Palisot de Beauvois as an Overlooked American Botanist. Proc. Amer. Philos. Soc., 76:899-920, port.

Pavetta in China (Rubiaceae). Lingnan Sci. Jour., 15:17-18.

Plants and Civilizations. Sci. Mo., 43:430-39; reprinted in: Harvard Tercentenary Conference of Arts and Sciences, *Independence, Convergence, and Borrowing, in Institutions, Thought, and Art* (Cambridge, Mass., Harvard Univ. Press), pp. 22-43.

Scuttling Atlantis and Mu. Amer. Scholar, 5:142-48.

Twenty-five Years of Systematic Botany, 1910-1935. Mem. Brooklyn Bot. Gard., 4:57-70.

Unrecorded Plants for Kwangtung Province. IV. Lingnan Sci. Jour., 15: 415-29.

1937

Review of America's Contribution to the Old World. Geog. Rev., 27: 153-54.

Aphanomyrtus Miquel and Pseudoeugenia Scortechini. Blumea Suppl., 1:107-11.

The Arnold Arboretum during the Fiscal Year Ended June 30, 1937. Jour. Arn. Arb., 18:349–59.

Botanical Collections, Botanic Garden, Bussey Institution, Arnold Arboretum (Reports for 1935-36). Off. Reg. Harvard Univ., 34: 292-97; 303-8.

The Cabot Foundation for Botanical Research. Harvard Alumni Bull., 39:1018-21.

The Chinese Species Described in Meyen's Observationes botanicae (Beiträge zur Botanik). Jour. Arn. Arb., 18:54-77.

Coleus Amboinicus. Addisonia, 20:11-12, pl. 646.

Domesticated Plants in Relation to the Diffusion of Culture. In: Early Man, pp. 277–84.

The Maria Moors Cabot Foundation for Botanical Research at Harvard University. Sci. Mo., 45:276-81, 7 figs.

Miscellanea Sinensia. Sunyatsenia, 3:246-62, pl. 32.

Myrtaceae. In: E. Irmscher, Beiträge zur Kenntnis der Flora von Borneo. Mitt. Inst. Allgem. Bot. Hamburg, 7:269.

Nathaniel Lord Britton (1859-1934). Yearb. Amer. Philos. Soc., pp. 341-43.

New Names in Timonius. Jour. Arn. Arb., 18:130-32.

On Lactuca indica Linnaeus. Bot. Mag. Tokyo, 51:192-96, pl. 3.

On the Significance of Certain Oriental Plant Names in Relation to Introduced Species. Proc. Amer. Philos. Soc., 78:111-46.

On the Technique of Inserting Published Data in the Herbarium. Jour. Arn. Arb., 18:173-82.

Plants and Civilizations. Proc. Roy. Can. Inst., III A, 2:26-29.

Polynesian Botanical Bibliography 1773–1935. Bull. Bishop Mus., 144: 1–194.

Problems in Plant Nomenclature. Mo. Bull. Hort. Soc. N. Y., Dec., 1937, pp. 9–10, 14–15.

Razumovia Sprengel versus Centranthera R. Brown, Bull. Torrey Bot. Club, 64:589-98.

Rubiaceae. In: E. Irmscher, Beiträge zur Kenntnis der Flora von Borneo. Mitt. Inst. Allgem. Bot. Hamburg, 7:270–301.

With F. P. Metcalf. New Kwangtung Plants. Lingnan Sci. Jour., 16:71-88, figs. 1-6; 168-80, figs. 7-12.

With F. P. Metcalf. Systematic Notes on Hainan Plants Including New Species, I. Lingnan Sci. Jour., 16:181-97, figs. 1-6; II. Lingnan Sci. Jour., 16:389-407, figs. 1-5.

Reinstatement and Revision of Cleistocalyx Blume (Including Acicalyptus A. Gray), a Valid Genus of the Myrtaceae. Jour. Arn. Arb., 18: 322-43, pl. 215.

1938

The Arnold Arboretum during the Fiscal Year Ended June 30, 1938. Jour. Arn. Arb., 19:446-60.

Biographical Memoir of Nathaniel Lord Britton, 1859–1934. Nat. Acad. Sci. Biogr. Mem., 19:147–202, ports.

Botanical Collections, Botanic Garden, Bussey Institution, Maria Moors Cabot Foundation for Botanical Research, Arnold Arboretum (Reports for 1936-37.) Off. Reg. Harvard Univ., 35:305-7; 315-21; 330-31.

A Critical Consideration of Houttuyn's New Genera and New Species of Plants, 1773-1783. Jour. Arn. Arb., 19:291-375.

Domesticated Plants in Relation to the Diffusion of Culture. Bot. Rev., 4:1-20.

New or Noteworthy Indo-Chinese Plants. Jour. Arn. Arb., 19:21-70, 3 figs.

New Sumatran Plants, III. Pa. Mich. Acad. Sci., 1937, 23:177-202.

On Houttuyn's Overlooked Binomials for Native or Introduced Plants in Eastern North America. Rhodora, 40:288–93, pl. 495; reprinted Contr. Gray Herb., 122:288–93.

The Possibilities of a Tropical Botanical Garden in Florida. In: M. S. Douglas, Dedication Fairchild Tropical Garden, pp. 5-7.

Preliminary Report on the Storm Damage to the Arboretum on September Twenty-first. Arnold Arb. Bull. Pop. Inf. IV., 6:70.

Suganda. An Interesting Aromatic Herb. Herbarist, 4:5-9, pl. 1.

With F. P. Metcalf. A New Species of Boottia from Hainan. Lingnan Sci. Jour., 17:567-70, pl. 24, 25.

With L. M. Perry. The Myrtaceae of China. Jour. Arn. Arb., 19:191–247. With L. M. Perry. On the Indo-Chinese Species of Syzygium Gaertner. Jour. Arn. Arb., 19:99–116.

With L. M. Perry. A Synopsis of Acmena DC., a Valid Genus of the Myrtaceae. Jour. Arn. Arb., 19:1-20.

With E. H. Walker. A Bibliography of Eastern Asiatic Botany. Jamaica Plain, Mass., Arnold Arboretum of Harvard University. xlii+719 pp., 2 maps.

1939

Additional Notes on Houttuyn's Binomials. Jour. Arn. Arb., 20:264-68. The Arnold Arboretum during the Fiscal Year Ended June 30, 1939. Jour. Arn. Arb., 20:446-62.

Botanical Collections, Botanic Garden, Bussey Institution, Arnold Arboretum, Maria Moors Cabot Foundation for Botanical Research (Reports for 1937–38). Off. Reg. Harvard Univ., 36:350–54; 362–69; 380–82.

The Genesis and Development of the Arnold Arboretum. Hillcrest Gardens. The Thirtieth Summer, pp. 9-15.

Index Kewensis in Improved Loose Leaf Ledger Form. Arn. Arb. Bull. Pop. Inf. IV., 7:37-40, pl. 6.

A New Species of Byttneria from Mangareva. Bishop Mus. Occ. Pa., 14: 313-15, 1 fig.

New Sumatran Plants, IV. Pa. Mich. Acad. Sci., 1938, 24(1):63-92.

Plants and Civilization. In: Official Program, 68th Annual Spring Flower Show, Massachusetts Horticultural Society, pp. 43, 45, 47.

Recent Accessions at the Arnold Arboretum. Harvard Alumni Bull., 41: 1002-4.

Records of Indo-Chinese Plants. Jour. Arn. Arb., 20:346-55.

Two New Species of Opposite-Leaved Ilex from Borneo, Jour. Arn. Arb., 20:222-24.

William Henry Brown. Science n.s., 90:531-32.

With L. M. Perry. Additional Notes on Chinese Myrtaceae. Jour. Arn. Arb., 20:102-3.

- With L. M. Perry. The Myrtaceous Genus Syzygium Gaertner in Borneo. Mem. Amer. Acad. Arts Sci., 18:135-202; reprinted Mem. Gray Herb. Harvard Univ., 4:135-202.
- With L. M. Perry. On Certain Malaysian Species of Meliosma Blume. Jour. Arn. Arb., 20:356-60.
- With L. M. Perry. On the Brass Collections of Pandanaceae from New Guinea. Jour. Arn. Arb., 20:139-186, pls. 1, 2.
- With L. M. Perry. Plantae papuanae Archboldianae, I. Jour. Arn. Arb., 20:324-45.

1940

- Acacias. In: Official Program, 69th Annual New England Spring Flower Show, Massachusetts Horticultural Society, pp. 20-21, 23.
- The Arnold Arboretum during the Fiscal Year Ended June 30, 1940. Jour. Arn. Arb., 21:528-43.
- The Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Arn. Arb. Bull. Pop. Inf. IV., 8:65–74, pl. 8–10; abridgment, Parks and Recreation, 24:246–51, 2 figs. (1941).
- Botanical Collections, Botanic Garden, Bussey Institution, Arnold Arboretum, Maria Moors Cabot Foundation for Botanical Research (Reports for 1938-39). Off. Reg. Harvard Univ., 37:385-89; 398-406; 421-22.
- Botanical Results of the George Vanderbilt Sumatran Expedition, 1939. Plants from Mt. Löser. Not. Nat., 47:1-9.
- Homonoia Loureiro (1790) and Lasiococca Hooker f. (1887). Lingnan Sci. Jour., 19:187–89.
- Review of Maize and Its Origin. Geog. Rev., 30:172-73.
- The Ochnaceous Genus Capusia H. Lecomte (1926), a Synonym of the Celastraceous Siphonodon Griffith (1844). Jour. Arn. Arb., 21:108–9.
- Review of The Origin and Evolution of Mediterranean Agriculture. Geog. Rev., 30:688.
- Records of Indo-Chinese plants, II. Jour. Arn. Arb., 21:364-91.
- A Revised List of Hainan Myrtaceae. Lingnan Sci. Jour., 19:183-85.
- With W. Y. Chun. Additions to Our Knowledge of the Hainan Flora, III. Sunyatsenia, 5:1-200, pl. 1-28, fig. 1-22.
- With F. L. Freeman. The Old World Species of the Celastraceous Genus Microtropis Wallich. Proc. Amer. Acad. Arts Sci., 73:271-310; reprinted Mem. Gray Herb. Harvard Univ., 5:271-310.
- With L. M. Perry. A New Philippine Isoetes. Amer. Fern Jour., 30:18-20, 2 figs.

With L. M. Perry. Plantae papuanae Archboldianae, II. Jour. Arn. Arb., 21:163–200, pl. 1; III. Jour. Arn. Arb., 21:292–327, fig. 1; IV. Jour. Arn. Arb., 21:511–27.

1941

The Arnold Arboretum during the Fiscal Year Ended June 30, 1941. Jour. Arn. Arb., 22:582-97.

Botanical Collections, Botanic Garden, Bussey Institution, Arnold Arboretum, Maria Moors Cabot Foundation for Botanical Research (Reports for 1939-40). Off. Reg. Harvard Univ., 38:1-40.

The Herb Garden at the Harvard Botanic Garden. Herbarist, 7:36, 2 figs. Man's Influence on the Vegetation of Polynesia, with Special Reference to Introduced Species. Proc. Sixth Pacific Sci. Congr., 4:629–39.

A New Species of Premna from the Philippines. Phytologia, 2:5-6.

A Note on the Dates of Issue of the Fascicles Comprising Cosson's Illustrationes florae Atlanticae, 1882–1897. Jour. Arn. Arb., 22:455–56.

A Note on the Dates of Publication of Wight's Icones Plantarum Indiae orientalis. Jour. Arn. Arb., 22:222-24.

A Simple Change in Name. Arnoldia, 1:1-2.

The Upper Burma Plants Collected by Captain F. Kingdon Ward on the Vernay-Cutting Expedition, 1938–39. Brittonia, 4:20–188, 3 figs.

With L. M. Perry. Observations on the Old World Species of Turpinia Ventenat. Jour. Arn. Arb., 22:543-55.

With L. M. Perry. Plantae papuanae Archboldianae, V. Jour. Arn. Arb., 22:32–59; VI. Jour. Arn. Arb., 22:253–70; VII. Jour. Arn. Arb., 22:375–88; VIII. Jour. Arn. Arb., 22:529–42.

With L. M. Perry. A Summary of Kentochrosia Lauterbach and Schumann. Phil. Jour. Sci., 76:19–21.

1942

American Weeds in the Old World Tropics. Amer. Jour. Bot., 29, Suppl. 14s.

The Arnold Arboretum during the Fiscal Year Ended June 30, 1942. Jour. Arn. Arb., 23:509-21.

Botanical Collections, Botanic Garden, Bussey Institution, Arnold Arboretum, Maria Moors Cabot Foundation for Botanical Research (Reports for 1940–41). Off. Reg. Harvard Univ., 39:1–44.

Review of The Flora of Fukien Province, China. Science, n. s., 96:232-33. Review of The Flora of the Hawaiian Islands and the History of the Pacific Basin. Geog. Rev., 32:171-72.

A Generally Overlooked Rafinesque Paper. Proc. Amer. Philos. Soc., 86:72-90.

Microfilm Records of the Linnean Society of London. Science, n. s., 96: 352-53.

Modern Facsimile Reproduction of Rare Technical Publications. Science, n. s., 96:180-81.

Las plantas domésticas y sus relaciones con la civilización. Trans. by Judith Rubenstein. Rev. Argentina Agron., 9:265–83.

Razumovia Sprengel versus Centranthera R. Brown again. In: Calcutta Royal Botanical Garden, 150th Anniversary volume, pp. 53-58.

Records of Indo-Chinese plants, III. Jour. Arn. Arb., 23:156-97.

Sargentia: A Word of Explanation. Sargentia, 1:iii-iv.

Some Aspects of Rafinesque's Botanical Work. Amer. Jour. Bot., 29, Suppl. 138-148.

With F. P. Metcalf. Hedyotis Linnaeus versus Oldenlandia Linnaeus and the Status of Hedyotis lancea Thunberg in Relation to H. consanguinea Hance. Jour. Arn. Arb., 23:226–30, 1 pl.

With L. M. Perry. Pandanaceae and Myrtaceae. In: A. C. Smith, Fijian plant studies II. Sargentia, 1:4-5; 74-78.

With L. M. Perry. Plantae papuanae Archboldianae, IX. Jour. Arn. Arb., 23:233-65; 267-97; X. Jour. Arn. Arb., 23:383-416.

1943

The Arnold Arboretum during the Fiscal Year Ended June 30, 1943. Jour. Arn. Arb., 24:488–97.

An Attempt to Complete the Record. Brittonia, 5:25-32.

Botanical Collections, Botanic Garden, Bussey Institution, Arnold Arboretum, Maria Moors Cabot Foundation for Botanical Research (Reports for 1941–42). Off. Reg. Harvard Univ., 40:1–45.

Botanical Survey of the Alcan Highway. Science, n. s., 97:574.

Destruction of the Berlin Herbarium. Science, n. s., 98:490-91.

Emergency Food Plant Manuals. In: Official Program, 72nd Annual New England Spring Flower Show, Massachusetts Horticultural Society, pp. 32, 33, 35, 37, 38, 1 fig.

Emergency Food Plants and Poisonous Plants of the Islands of the Pacific. War Dept. Tech. Man., 10-420. v+149 pp., 113 figs.

Figments of the Imagination. Science, n. s., 97:41-42.

Foreword to: An Introduction to Historical Plant Geography, by E. V. Wulff. pp. vii-viii.

An Index to Rafinesque's Published Technical Names for the Cellular Cryptogams. Farlowia, 1:245–62.

Microfilm Records of the Linnean Collections and Manuscripts. Science, n. s., 97:110.

New Names for Ferns and Fern Allies Proposed by C. S. Rafinesque, 1806–1838. Amer. Fern Jour., 33:41–56; 97–105.

Rafinesque's Publications from the Standpoint of World Botany. Proc. Amer. Philos. Soc., 87:110-19.

Report of the Exhibition Committee. In: 1943 Year Book Massachusetts Horticultural Society, pp. 52-56.

Some Economic Aspects of Taxonomy. Torreya, 43:50-64.

The Vegetation of Malaysia. Far Eastern Quarterly, 2:66-76.

With L. Chen. The Chinese and Indo-Chinese Species of Ormosia. Sargentia, 3:77-117.

With L. M. Perry. Plantae papuanae Archboldianae, XI. Jour. Arn. Arb., 23:34-59, figs. 1-7; XII, Jour. Arn. Arb., 24:207-17; XIII, Jour. Arn. Arb., 24:422-39.

1944

The Arnold Arboretum during the Fiscal Year Ended June 30, 1944. Jour. Arn. Arb., 25:488–500.

Botanical Collections, Botanic Garden, Bussey Institution, Arnold Arboretum, Maria Moors Cabot Foundation for Botanical Research (Annual Reports, 1942-43). Off. Reg. Harvard Univ., 41:1-41.

Review of A Catalogue of Vascular Plants [of S. Tomé]. Science, n. s., 100:521-22.

Dermatitis Caused by Various Representatives of the Anacardiaceae in Tropical Countries. Jour. Amer. Med. Assn., 124:222-24.

Emergency Food Manuals. Arnoldia, 4:29-36, pl. 3-5.

Foreword to Rafinesque's A Life of Travels. Chron. Bot., 8:292-97, pls. 5, 6.

Plants. In: The Pacific World, ed. by F. Osborn, pp. 94–102.

With L. M. Perry. Plantae papuanae Archboldianae, XIV. Jour. Arn. Arb., 25:183-205.

1945

The Arnold Arboretum and Its Work. Jamaica Plain, Mass., April. Unpaged folder (6 p.).

The Arnold Arboretum during the Fiscal Year Ended June 30, 1945. Jour. Arn. Arb., 26: 484–98.

Begonia in the Pacific Islands. Begonian, 12:83, 97.

Botanical Collections, Botanic Garden, Bussey Institution, Arnold Arboretum, Maria Moors Cabot Foundation for Botanical Research (Annual Reports 1943-44). Off. Reg. Harvard Univ., 42:1-37.

Contact Poison Plants in the Old World Tropics. U. S. Army Med. Dept., Bull., 87:115-17.

Destruction of the Bureau of Science at Manila. Science, n. s., 101:401.

Emergency Food Manuals. Chron. Bot., 9:174-76, 2 pls.

Fern Names in Bartram's Travels, 1791. Amer. Fern Jour., 35:23-25.

Review of Foundations of Plant Geography. Sci. Mo., 60:76.

In Defense of the Validity of William Bartram's Binomials. Bartonia, 23:10-35.

Review of *Men of Science in America*. Jour. N. Y. Bot. Gard., 46:203-4. Notes on Russian and Other European Herbaria. Science, n. s., 101:355.

Ochrocarpos odoratus (Rafinesque) Merrill, a New Name for a Much Named Species, with a New Species from Samoa. Jour. Arn. Arb., 26: 93-96, 1 fig.

On the Underground Parts of Tacca pinnatifida J. R. & G. Forst (1776) = Tacca leontopetaloides (Linn.) O. Kuntze. Jour. Arn. Arb., 26:85-92, pl. 1, 2.

The Philippines as a Source of Orchids. Amer. Orchid Soc. Bull., 13:328-34, fig. 4.

Review of The Phytogeographic Divisions of China, with Special Reference to the Araliaceae. Geog. Rev., 35:691.

Plant Life of the Pacific World. New York, Macmillan. xv+295 pp., 256 figs. Fighting Forces edition, Washington, D. C., Infantry Journal, xviii+298 pp., 256 figs.

Report of the President. In: Proceedings of the Seventh Annual Meeting of the Fairchild Tropical Garden, Feb. 21, 1945, pp. 7-9.

Report on Progress Index Rafinesquianus. Yearb. Amer. Philos. Soc., 1944, pp. 172-73.

Sir David Prain (1857–1944). Yearb. Amer. Philos. Soc., 1944, pp. 379–83. Two New Species from the Vicinity of Hongkong. Jour. Arn. Arb., 26: 163–67, fig. 1–3.

With F. P. Metcalf. Records of Monocotyledonous Plants New to the Flora of Hainan. Lingnan Sci. Jour., 21:1-14.

With L. M. Perry. Plantae papuanae Archboldianae, XV. Jour. Arn. Arb., 26:1-36, pl. 1; XVI. Jour. Arn. Arb., 26:229-66, fig. 1-11.

1946

The Amos Eaton Herbarium. Rhodora, 48:201-5.

The Arnold Arboretum during the Fiscal Year Ended June 30, 1946. Jour. Arn. Arb., 27:486–509.

The Arnold Arboretum, Harvard University, Jamaica Plain, Massachusetts. In: The Garden Club of America Programme Annual Meeting May 14, 15, 16, pp. 23-27, illus.

The Arnold Arboretum, Harvard University, Jamaica Plain, Massachusetts. Bull. Garden Club of America S 10, 7:9-13.

Botanical Collections, Botanic Garden, Bussey Institution, Arnold Arboretum, Maria Moors Cabot Foundation for Botanical Research (Reports for 1944–1945). Off. Reg. Harvard Univ. Reprint, pp. 1–28.

Dr. Thomas Barbour. Amer. Nat., 80:214-16, port.

Further Notes on Tobacco in New Guinea. Amer. Anthropol., 48:22-30.

A Mindoro Fern Adventure. Amer. Fern Jour., 36:33-47, 1 fig.

With L. M. Perry. Plantae papuanae Archboldianae, XVII. Jour. Arn. Arb., 27:193-233.

Report of the Committee on Exhibitions. Yearbook Massachusetts Horticultural Society, 1946, pp. 45-49.

Report of the President. Proceedings Eighth Annual Meeting, Fairchild Tropical Garden, pp. 6-8.

With L. M. Perry. Some Additional Records for the Guam Flora. Jour. Arn. Arb., 27:323-25.

With others. Thomas Barbour. Harvard University Gazette, 41:135. Thomas Barbour. Jour. Wash. Acad. Sci., 36:283–84.

1947

An Amateur Bryologist's Observations on the Philippine Moss Flora. Bryologist, 50:4–13.

A Botanical Bibliography of the Islands of the Pacific. Contr. U. S. Nat. Herb., 30:1-322.

Foreword to: Results of the First Thirty Years of Experimentation in Silviculture in the Harvard Forest, 1908–1938. Harvard Forest Bulletin, 23:5-8.

With L. M. Perry. Kajewskiella, a New Rubiaceous Genus from the Solomon Islands. Jour. Arn. Arb., 28:331-32, 1 pl.

Metasequoia, a Living Relict of a Fossil Genus. Jour. Roy. Hort. Soc., 73:211-16, figs. 87, 88, map.

With J. R. Reeder. New Plant Names Published by Amos Eaton between the Years 1817 and 1840. Bartonia, 24:26–79.

Notes on the Dates of Issue of Desvaux's Journal de Botanique. Jour. Arn. Arb., 28:247-50.

On the Identity of Brandisia Souliei Bonati. Jour. Arn. Arb., 28:251–52. With N. Y. Sandwith. On the Identity of the Genera Cupulissa Raf. and Platolaria Raf. Jour. Arn. Arb., 28:430–34.

The Technical Names of Allspice. Contrib. Gray Herb., 165:30–38, 1 fig. Unlisted Pteridophyte Binomials in Eaton's *Manual of Botany*. Amer. Fern Jour., 37:6–10.

1948

Alfred Rehder, One of This Country's Foremost Horticulturists. Green Thumb, 5(7):10–11.

C. S. Rafinesque, with Notes on His Publications in the Harvard Libraries. Harvard Library Bulletin, 2:5-21.

Cooperative Botanical Exploration in Eastern Asia. Science Counselor, 11:15, 16, 35, 36.

A Living Metasequoia in China. Science, n. s., 107:140.

Metasequoia, Another "Living Fossil." Arnoldia, 8:1-8, pls. 1, 2, fig. 3.

Neolitsea (Bentham) Merrill, Nomen Conservandum Propositum. Jour. Arn. Arb., 29:198–200.

Nomenclatural Notes on Rafinesque's Published Papers, 1804–1840. Jour. Arn. Arb., 29:202–14.

Note on Philip Miller's Binomials. Jour. Arn. Arb., 29:242-44.

With L. M. Perry. Notes on Some Papuan Collections of Mary Strong Clemens. Jour. Arn. Arb., 29:152-68.

On the Control of Destructive Insects in the Herbarium. Jour. Arn. Arb., 29:103-10.

An Overlooked Flora Indica. Jour. Arn. Arb., 29:186-92, 1 pl.

A Tree from the Age of Reptiles. Horticulture, 26:192, illus.

Unlisted Binomials in Chapman's Flora of the Southern United States. Castanea, 13:61-70.

Unlisted Fern Names of Alphonso Wood. Amer. Fern Jour., 38:142-47. Unlisted New Names in Alphonso Wood's Botanical Publications. Rhodora, 50:101-30.

1949

Adventures in Locating Validly Published but Unlisted Binomials. In: "Symposium on botanical nomenclature V." Amer. Jour. Bot., 36:14-19.

Foreword to: Bibliography of Cultivated Trees and Shrubs, by A. Rehder, pp. v-vii.

Foreword to: Rafinesque's Western Minerva, or American Annals of Knowledge and Literature (lithoprint edition), pp. i-iii.

Index Rafinesquianus. The Plant Names Published by C. F. Rafinesque with Reductions, and a Consideration of His Methods, Objectives and Attainments. ix +296 pp.

With L. M. Perry. Plantae papuanae Archboldianae, XVIII. Jour. Arn. Arb., 30:39–63.

With Shu-Ying Hu. Work and Publications of Henry Muhlenberg, with Special Attention to Unrecorded or Incorrectly Recorded Binomials. Bartonia, 25:1-66, 1 pl.

1950

A Brief Survey of the Present Status of Bornean Botany. Webbia, 7:309–24. A New Name for a Central American Ilex. Ceiba, 1:124–25.

Observations on Cultivated Plants with Reference to Certain American Problems. Ceiba, 1:3-36.

On the Synonymy of Jossinia reinwardtiana (Blume) Blume. Jour. Arn. Arb., 31:329-33.

Readjustments in the Nomenclature of Philippine Eugenia Species. Phil. Jour. Sci., 79:351-430.

Unlisted Technical Plant Names in the Published Works of L. Oken (1841) and J. S. Presl (1846). Jour. Arn. Arb., 31:264-87.

1951

Merritt Lyndon Fernald (1873-1950). Yearb. Amer. Philos. Soc., 1950, pp. 287-95.

Notes on Elaeocarpus Linnaeus. Jour. Arn. Arb., 32:157-200.

On Certain Nomenclatural Errors in the Euphorbiaceae. Jour. Arn. Arb., 32:79-81.

On the Identity of the Genus Baranda Llanos. Jour. Arn. Arb., 32: 409-11.

Tatea F. Mueller (Pygmaeopremna Merrill) and Premna Linnaeus. Jour. Arn. Arb., 32:73-78.

1952

The Fugitive Place Names "Hamao" and "Romoa" in Roxburgh's Flora Indica Errors for Honimoa-Saparua. Taxon, 1:124–25.

Notes on Xanthostemon F. Mueller and Kjellbergiodendron Burret. Jour. Arn. Arb., 33:150-65.

Reductions in Elaeocarpus. Proc. Roy. Soc. Queensland, 62:49-56.

With C. G. G. J. van Steenis. Reductions of Two Malaysian Genera of Euphorbiaceae. Webbia, 8:405–6.

William Jack's Genera and Species of Malaysian Plants, Jour. Arn. Arb., 33:199–250, 1 pl.

1953

Autobiographical: Early Years, the Philippines, California. Asa Gray Bull., n.s., 2:335-70.

With E. Quisumbing. New Philippine Plants, II. Phil. Jour. Sci., 82: 323-37.

1954

Bibliographic Notes on G. Forster's De plantis esculentis insularum oceani australis (1786). Pacific Sci., 8:35-40.

Biographical Memoir of Merritt Lyndon Fernald 1873–1950. Nat. Acad. Sci. Biog. Mem., vol. 28, pp. 45–64, port.

The Botany of Cook's Voyages and Its Unexpected Significance in Relation to Anthropology, Biogeography and History. Chron. Bot., 14: 163–384.

Miscellaneous Malaysian Notes. Jour. Arn. Arb., 35:134-56, 1 pl.

1955

Real Values. Asa Gray Bull. n.s., 3:27-32.

ARTICLES ABOUT ELMER D. MERRILL

1927

Prof. E. D. Merrill Appointed Director of New California Botanical Garden at Los Angeles. Jour. N. Y. Bot. Gard., 28:201.

1929

Lipman, C. B. Dean Merrill-An Appreciation. Calif. Countryman, 16:9.

1930

Elmer Drew Merrill the New Director-in-Chief of The New York Botanical Garden. Jour. N. Y. Bot. Gard., 31:6-10, port.

1935

Director Merrill Accepts Harvard Univ. Position. Jour. N. Y. Bot. Gard., 36:162.

Resolutions of the Board of Managers in Accepting the Resignation of Director Merrill. Jour. N. Y. Bot. Gard., 36:243.

1936

Dr. E. D. Merrill, Administrator of the Botanical Collections of Harvard University, Has Been Elected an Honorary Member of the Botanical Society of Japan. Science, n. s., 83:460.

Doctorate of Science Conferred on Dr. Elmer Drew Merrill at the Commencement Exercises of Harvard University. Science, n.s., 83:617.

[Honor conferred upon Dr. Merrill by the Institute of the Museum of the National University of La Plata, in the session of the Academic Council on Sept. 17, 1936.] Rev. Argent. Agron., 3:262.

1938

Elected an Académico Honorario of the Instituto del Museo, Universidad de la Plata, Argentina. Science, n.s., 87:135.

1939

Linnean Medal for 1939 Bestowed on Dr. E. D. Merrill on May 24. Harvard Alumni Bull., 41:1005.

The Gold Medal of the Ministère de l'Agriculture of the French Republic and the Corresponding Diploma of the Société Nationale d'Acclimatation de France Conferred on Dr. Merrill at a Session of the Society in Paris on Feb. 12, 1939, in Appreciation of His Services to French Horticulture. Arn. Arb., Bull. Pop. Inf., Ser. 4, 7:14.

Awarded Linnean Gold Medal. Science, n.s., 89:383.

1946

Honour for Dr. E. D. Merrill. Gardeners' Chronicle, 119:251.

Professor E. D. Merrill. Nature, 158:577.

Chevalier, Aug. Jubilé du Professeur E. D. Merrill. Rev. Inter. Bot. Appl. Agr. Trop., 26:670.

Verdoorn, Frans. Merrilleana. Chron. Bot., 10:127-394, 23 illus.

1947

Merrilleana. Gardeners' Chronicle, 121:32.

1953

Merrill, E. D. Autobiographical: Early years, the Philippines, California. Asa Gray Bull., n.s., 2:335-70, 3 ports.

1955

Merrill, E. D. Real Values. Asa Gray Bull., 3:27-32.

1956

Burkill, I. H. Prof. E. D. Merrill. Nature, 177:687-88.

Ewan, Joseph. E. D. Merrill. Jour. Wash. Acad. Sci., 46:267-68.

Howard, Richard A. Elmer Drew Merrill, 1876-1956. Jour. Arn. Arb., 37:197-216, port.

Lanjouw, J. Elmer D. Merrill, 1876-1956. Taxon, 5:21.

Rickett, H. W. Elmer Drew Merrill, 1876–1956. Jour. N. Y. Bot. Gard., 6:84, 90.

Robbins, William J. Elmer Drew Merrill (1876–1956). Yearb. Amer. Philos. Soc., 1956, pp. 117–19.

Rollins, Reed C. Elmer Drew Merrill, Administrator and Botanist. Science, n. s., 123:831-32.

Quisumbing, Eduardo. Elmer Drew Merrill. Phil. Jour. Sci., 85:181-88.

1957

Burkill, I. H. Elmer Drew Merrill. Proc. Linnean Soc. London, 168:51–56. Schultes, Richard Evans. Elmer Drew Merrill—An Appreciation. Taxon, 6:89–101, 2 ports. and a caricature.

Walker, Egbert H. Dr. Elmer D. Merrill, 1876-1956. Pacific Sci., 11: 135-36.